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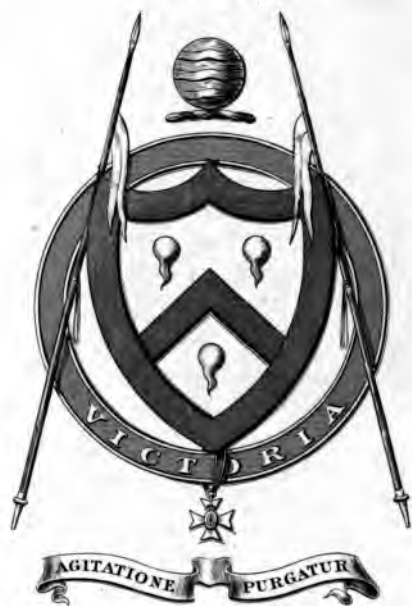
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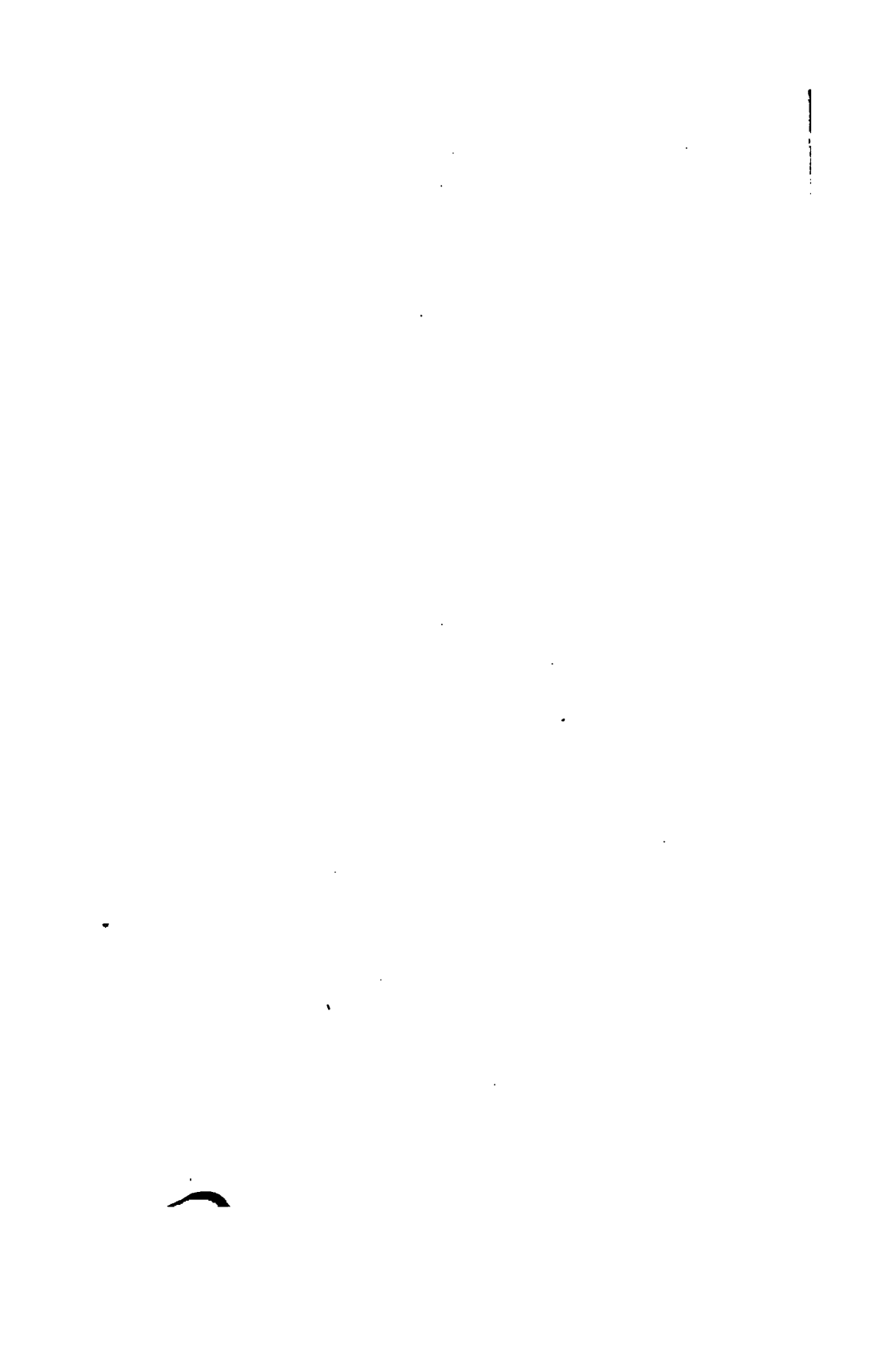


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*Major General John Cecil Russell,
Colonel 12th Royal Lancers.*





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I

I

THE LAST CAMPAIGN
OF
HANOVER.

A LECTURE

DELIVERED AT THE ROYAL UNITED SERVICE INSTITUTION,
ON 1st APRIL, 1870,

BEFORE

FIELD MARSHAL H.R.H. THE DUKE OF CAMBRIDGE,
K.G., ETC., ETC., COMMANDING-IN-CHIEF,

BY

CAPT. HENRY BRACKENBURY, R.A.,

PROFESSOR OF MILITARY HISTORY AT THE ROYAL MILITARY ACADEMY.

LONDON:
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L. C. Karpinski
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THE LAST CAMPAIGN OF HANOVER.

WHEN I received the invitation of the Council of this Institution to lecture here, the choice of the subject being left to myself, I had recently returned from visiting the theatre of the war of 1866 in Western Germany, and from studying on the spot those operations of General Falckenstein which had led to the dispersion or the defeat of three several armies, and the clearance of the whole of Germany, north of the Maine, from the enemies of Prussia; and on my return to England I had been much struck, not only with the absence of correct knowledge as to this campaign in Western Germany, but with the amount of wrong information which appeared to exist, more especially as to that earlier portion of the campaign which took place in Hanover.

I have here a well known book, which may perhaps be fairly said to represent the historical and geographical knowledge of a large portion of my fellow-countrymen on this subject—"Murray's Handbook." Turning to Langensalza I find it described as a town "giving name to a battle in 1866, in which the Hanoverian army, attempting to "escape south, were defeated by the Prussians." There never was a greater libel upon a gallant nation; and, indeed, there is something almost repugnant to one's feelings of fair play in the assumption which seems to underlie this statement, and many others which I have seen, that the Prussians must have won every battle that they fought, and that their strategy and their tactics must have been perfect in every portion of that war. I thought, then, I might do something towards the cause of historic truth were I to accept the invitation of the Council, and to tell here the plain, unvarnished, true, story of the campaign of Hanover, as I derive it from the closest comparison of official accounts, both Prussian and Hanoverian, with such other trustworthy data as I have been able to collect, and from the closest study of the ground on which the campaign was fought.

Passing entirely over all the political events which led to the outbreak of this war, we arrive at the 14th of June, 1866. On that day.

a vote of the Federal Diet was passed—hostile to Prussia, and decreeing the mobilisation of the Federal Army against her. At once the Prussian Ambassador declared the Diet dissolved, and on the 15th, Prussia, having previously telegraphed a summons to Hanover to accept her terms, declared war against Hanover, Saxony, and Hesse-Cassel.

The importance to Prussia, with the view to subsequent operations against the south, of first making herself mistress of these three countries, was very great. Hanover lies directly between the western and eastern provinces of Prussia, and, in an enemy's hands, interposes an effectual bar to the passage of troops between them; in like manner Hesse-Cassel interposes between these western and eastern possessions; and, moreover, through Cassel passes that railroad which is the great artery of communication between those provinces. Of Saxony I need not now speak.

At once, after her declaration of war, Prussia put her troops in motion. At this time the army of Hanover was in that unfortunate condition which is known as a "peace footing." Large numbers of her infantry were on furlough; her cavalry and her artillery were perhaps in a somewhat better condition than usual, because it was the season of the summer drills, and they happened to be called out for regimental exercise; but they had only horses for a peace establishment. Neither cavalry nor artillery had the proper number of horses required for them to take the field, and some of the guns were actually led out to fight this campaign horsed with horses from the King's stables, and driven by the King's stablemen. At the time of this declaration of war, and of the immediately subsequent movement of Prussian troops, the Hanoverian army was in a state of dislocation, as it is termed, though immediately after the decree of mobilisation had been passed in the Diet on the 14th of June, it had been ordered that the troops should be assembled at certain points by the 23rd June. But all the arrangements for the mobilisation of the army pointed towards concentration in the northern portion of the kingdom. There were no arrangements whatever for the assembly of troops in the south; there were no magazines, there were no stores of supplies, there was, in fact, nothing ready for such a concentration. But when Hanover saw that the Prussian troops were about to advance from Minden towards Hanover, when she saw that troops were actually in the north of her own territory, as some of them were, before war was declared, it was impossible for her, as she well knew, to concentrate in time in the north, and therefore the order was issued for the concentration of the whole army in the extreme south of the Hanoverian territory, at the well known university town of Göttingen.

The troops with which Prussia was about to commence this campaign consisted, in the first place, of a division under the command of General Goeben, which was stationed at the Prussian fortress of Minden, 14,000 strong. There was also a corps under the command of General Manteuffel, which was, as I have already said, at the outbreak of this campaign—at all events some portion of its troops were—on Hanoverian territory. When the difficulties had arisen *with Austria*, and Prussia had occupied Holstein, the Austrian

had obtained permission for their brigade Kalik to march through Hanover to the south, and the Prussians had followed this by a request for permission for their troops also to pass through Hanoverian territory to Minden. The permission had been granted, General Manteuffel had taken advantage of it, and had actually, before the war was declared, brought some of his troops across the Elbe to Harburg. In addition to this corps of 14,000 of General Manteuffel's in the extreme north, and the corps of 14,000 under General Gœben at Minden, 20,000 troops under the command of General Beyer, which were in the small Prussian enclave at Wetzlar, received orders from the head-quarters at Berlin to move at once on Cassel. General Falckenstein was placed in command of the two divisions which were to advance from Minden and from the Elbe upon Hanover, with orders to operate against the Hanoverian Army, to disarm it, and prevent its taking any further part in the war, always bearing in mind that he would be required for subsequent operations in the south. The advance of these troops commenced immediately after the declaration of war. Beyer, moving in a north-easterly direction, had occupied Cassel, and had drawn together the whole of his troops there by the 20th of June, the small Army of the Elector having escaped southwards to Frankfort-on-the-Maine. Gœben, moving from Minden, had occupied Hanover late on the 17th of June, and Manteuffel, moving southwards after taking Stade, had marched some distance along the road towards Hanover.

The Hanoverians, as they moved the whole of their troops towards Göttingen, the point named for concentration, had broken up the railways south of Hanover, and had removed all the rolling stock to points south of the broken portions, so that none of it was available for the operations of the Prussians, who were endeavouring to march southwards as rapidly as they could. On the 20th of June the Hanoverian Army was concentrated at Göttingen; it was about 20,000 strong, divided into four brigades, placed under the command of Generals Knesebeck, De Vaux, Bülow, and Bothmer. They had with them some 1,700 or 1,800 cavalry, and about 42 guns, of which 22 were rifled. But they had no field organization of commissariat, they had no field hospital organization, they had no field transport organization, and those, I need scarcely say before such an audience as this, are not services which can be organized at four days' notice.

On the 20th of June we find the Hanoverian Army assembled at Göttingen. We find Beyer with his 20,000 troops, equal in number to the Hanoverians, at Cassel; we have Gœben with his 14,000 troops, except such portion as he has left in Hanover, two marches south of Hanover, on the road to Göttingen; and we have General Manteuffel still north of the capital with the bulk of his troops, though he has brought some of them down to Hanover.

Now, the problem for Hanover was, in the face of these troops assembling around her, what should be her course? She had reason to expect at this time that a Bavarian Army, which she knew had assembled to the number of about 40,000 on the river Maine, somewhere between Schweinfurt and Bamberg, would come to her assist-

ance. She also placed a certain amount of hope in the 8th Federal Corps, which was assembling at Frankfort-on-the-Maine. She trusted these would come to her aid, and she resolved to march down south to join them, relying on concentration with them as her best and only chance. Accordingly, her first plan was to move by Witzendahusen and Allendorf on Eschwege, and thence to Bebra or Eisenach, and so to join the Bavarians. It was intended that her troops should commence the march on the 21st, but on the 19th she received information that General Beyer was with his division at Cassel. Then she resolved that the march of her troops should be by way of Heiligenstadt, and thence in two columns by Wanfried and Mühlhausen on Eisenach.

On the 21st, the march of the Hanoverian troops commenced, and their head-quarters that evening were at Heiligenstadt. Then Hanover ascertained that General Beyer had pushed forward his troops, and had occupied some of the defiles of the river Werra; she heard, in fact, of troops being at Eschwege, for Beyer had put some infantry on waggons, and had sent them forward to occupy this place. She therefore decides that her march shall be no longer directed upon Wanfried, but that the whole Army shall move by Mühlhausen, and thence on Eisenach. Accordingly, on the 22nd her troops are again put in motion, and the head-quarters of her Army are brought to Mühlhausen.

In the meantime, General Falckenstein has decided that the division of Beyer, and his own division, shall be concentrated against the Hanoverians, whom he still believes to be at Göttingen. Marching south, the Hanoverians had left a rear guard north of Göttingen, and Falckenstein, coming down from Hanover, has encountered it, and believes it may be taken as an indication that the Hanoverian troops are about to defend Göttingen against him. Accordingly, he has ordered General Beyer to concentrate with him. Early on the 22nd Beyer had put his troops in motion, so that by night some of them are at Allendorf, some at Lichtenau, some at Münden, and some at Cassel. On this night of the 22nd, there is absolutely not one company to bar the march of the Hanoverians, if they should take the road by Gotha, because on the 21st the sole garrison of Gotha, two battalions of the troops of Saxe-Coburg-Gotha, had been moved, by order from Berlin, from Gotha to Eisenach. There were on this evening, in Eisenach, only these two battalions, each about 600 strong, and three weak battalions of Landwehr, which had been sent from the garrison of Erfurt. There is not a man, I repeat, in Gotha, or between Erfurt and Eisenach, which is thus feebly garrisoned, and the Hanoverian head-quarters are at Mühlhausen.

On the morning of the 23rd the Hanoverians, unaware of Beyer's movement to his left, again commenced their march. There is no doubt, from the official Hanoverian accounts, that the King of Hanover was most anxious, if it were possible, to effect his movement south without bloodshed; and fearing that, if he made a direct movement in the direction of Eisenach, he might be attacked in the defiles of the Hainich, and that his course might perhaps be stopped, and a battle

might ensue,—his troops also being badly provisioned, and the horses out of condition and exhausted, he decided to move by Langensalza, and thence to make his way southward through the Thuringian forest. On the 23rd, the Hanoverian Army moves, and, without encountering any enemy, reaches Langensalza, one of its four brigades being pushed out on the right flank to Behringen.

On the 21st, General Falckenstein had received information which placed it beyond doubt that the Hanoverians were not remaining in Göttingen, but were moving south on Mühlhausen. He therefore sends orders to Beyer to move on Eisenach, in order, if possible, to cut them off. The orders, however, do not reach Beyer's troops until they have completed their day's march on the 22nd, and they are not able to be put in motion again that day. On the 23rd they are still cantoned along the lower Werra, while Falckenstein, who has now reached Göttingen, halts his troops, Manteuffel being still in rear, and the Hanoverians in motion from Mühlhausen upon Langensalza.

We now hear of one of those remarkable incidents of warfare, which can only be understood, when we remember the proverb that "all is fair in love and in war." In the course of this day there arrived in the Hanoverian camp an officer from Gotha, where, as I have already told you, there was not a Prussian soldier, bearing a telegram from General von Moltke, at Berlin, to the effect that the Hanoverians were surrounded by the Prussians, and urging that they had better lay down their arms to save bloodshed. The King refused to consent to this request, but his troops were halted at Langensalza and at Behringen, and he sent an officer, one Major von Jacobi, to Gotha, to enter into negotiations with the King of Prussia at Berlin. The Prussian official account says, "From the moment that the Hanoverian army commenced to enter into negotiations, its fate was decided." There is no doubt that it was so. From that moment we cease to see the steady pursuit of one single purpose, the march southward; we see only divided councils, partly the desire to march southwards, and partly the desire to save bloodshed by negotiations.

General Bülow's brigade has, on the night of the 23rd, its headquarters at Behringen; the remainder of the Army is about Langensalza. In the evening, the troops of Saxe-Coburg-Gotha have been brought back from Eisenach to Gotha, and two battalions of Guards have arrived by rail from Berlin at Eisenach, so that there is now a small garrison both at Eisenach and at Gotha. During the night of the 23rd, information was received at the Hanoverian headquarters, by which it appeared that they were certainly not surrounded so that it would be necessary for them to lay down their arms, but that Gotha, at all events, was only weakly garrisoned; so the King ordered an attack in force to be made on Gotha at five o'clock on the morning of the 24th. Very shortly after issuing that order, information reached him from the cavalry patrols to the effect that Eisenach was denuded of troops, because the battalions of Saxe-Coburg-Gotha had been moved back to Gotha, and the Guards had not yet arrived at Eisenach. Accordingly, orders were issued that the attack on Gotha should not be carried out, but that, while a demonstration was made there,

the real attack should be made in force upon Eisenach, with the view of breaking through, and so marching south. Before, however, these orders were carried out on the morning of the 24th, Major Jacobi returned from Gotha to the head-quarters at Langensalza, and informed the Commander-in-Chief of the Hanoverian Army, General von Arentsschildt, that he had received private information (I am taking this from the Hanoverian official account) placing it beyond doubt not only that Gotha is strongly garrisoned, but that the bulk of General Gœben's division has arrived there by rail from Hanover. At this time there were really only two weak battalions at Gotha. Major Jacobi also said he had every reason to believe that the proposition of which he had been the bearer from the King of Hanover, that the troops should be allowed a free passage south on condition of their not fighting for about two months, would be acceded to by the Prussians. The King, on receipt of this information, still anxious to save bloodshed, still anxious, if it were possible, to get to the south by peaceable means, countermands the order which he had issued for the attack to be made on Eisenach, and sends Major Jacobi back to Gotha. But a Staff Officer, Colonel Rudorff, who had accompanied the column of Bülow, and General Bülow, were so convinced of the immense importance of occupying Eisenach, whether the negotiations should come to a successful end or not, that they decided upon advancing upon the town, and summoning the officer in command to surrender, though resolving that they will not actually proceed to the assault until they have received further orders from head-quarters. On the morning of the 24th Bülow's brigade advances from Behringen upon Eisenach. About nine o'clock he summons Colonel von Osten Sacken, who is commanding the two regiments of Guards there, to surrender. He refuses to do so, and Bülow gives him until three o'clock in the afternoon either to surrender, or to remove the inhabitants, other than soldiers, out of Eisenach. Word is sent back to head-quarters of what has been done, and the King is now so completely convinced of the falsity of General von Moltke's telegram, that he orders the other brigades to follow Bülow, and sends word to that commander to continue the attack, but to give half an hour's more law to the Colonel commanding at Eisenach.

On that half hour hung the fate of the Hanoverian Army. Bülow has summoned Colonel von Osten Sacken to the final surrender. He has placed his infantry in position to attack Eisenach; he has got his guns in battery; when there comes to him a telegram from Major Jacobi to the effect that the Hanoverian terms have been agreed to, and that hostilities should therefore be avoided. Bülow holds a council of war, and they decide that, in the face of this, he cannot attack Eisenach. Accordingly, he agrees to a truce till eight a.m. of the 25th, to be terminable at three hours' notice.

How did this happen? The King had resolved to break off the negotiations, and Major Jacobi had been ordered back from Gotha to Langensalza, having been confidentially informed of Bülow's intended attack upon Eisenach; but Major Jacobi remained at Gotha after receiving those orders. A telegram meanwhile arrives from Count

Bismarck, saying that certain terms have been agreed to. But these terms appear not to have been those which the King of Hanover had offered. It appears that suggestions had been made to Berlin, but not by the King of Hanover, that the Hanoverian Army should be allowed to march southward, on the condition of its not fighting against Prussia for one year. Those terms, which had not been offered by Hanover, were the terms which were said to be accepted, and it being stated that a Prussian General Officer was on the road from Berlin to complete negotiations with the King of Hanover, Major Jacobi had been induced to send this telegram to Bülow, which prevented, as the Prussians themselves say in their official account, the capture of Eisenach; and which thus was the final cause that prevented the Hanoverian Army from escaping to the south. When General von Arentsschildt rides up from Langensalza to Eisenach, and expects to find that city in Bülow's hands, he finds there instead Jacobi's telegram. It is now evening; after three hours' notice it would be too late for an attack to be made on Eisenach, and accordingly no operations could be carried on till the following morning. But before the following morning Falckenstein, recognising the enormous importance of reinforcing Eisenach, has hurried up a detachment of Gœben's troops by the railway, which is now repaired from Göttingen as far as Münden, and again from Cassel to Eisenach. Beyer has now brought numbers of his troops southward along the Werra. A detachment, under command of General Flies, has been sent round from Manteuffel's division by rail far away to the east, by Magdeburg, through Erfurt, towards Gotha. Troops, under the command of General Seckendorf, which had been sent to intercept the Hanoverians, in case of their marching in a north-easterly direction, have also been sent round towards Gotha.

Yet still on the morning of the 25th there was no force which could have withstood the attack of the Hanoverians. But the reinforcements were exaggerated in the Hanoverian camp; and the King resolved to await the arrival of the Prussian envoy from Berlin, in hopes of successful negotiations. He came. His terms were such as the King would not accept; but a short truce was arranged, Prussia wanting time to surround the Hanoverians, Hanover wanting time to receive aid from Bavaria. The day was thus lost to the Hanoverians, but not so to Prussia.

Beyer's troops have reached Kreuzburg and Treffurt; some of them have gained Eisenach. The bulk of Gœben's division is at Eisenach. Flies and Seckendorf, and more troops from Erfurt, have reached Gotha, and so that night there were about 8,000 men at Kreuzburg, 12,000 men in Eisenach, and 8,000 in Gotha; whereas, on the two preceding days there was scarcely a man to oppose the Hanoverian march.

And now General von Falckenstein himself has arrived on the scene at Eisenach. He has refused to let a Hanoverian envoy proceed to Berlin: he says he does not recognise the truce which has been made by General von Alvensleben, the officer from Berlin, and he impresses the belief so strongly on the Hanoverian envoy that Bülow's troops were to be attacked in front of Eisenach, that they were drawn back to

Behringen. On the 26th the truce is recognised by Falckenstein, but a Prussian envoy arrives at the Hanoverian Camp, and says that he has received orders that unless the terms which Prussia offers are accepted, (practically the same terms which had been offered before the declaration of war, and which the King had refused and now again refuses to accept,) the Prussians will immediately attack the Hanoverians. Then on the 26th the Hanoverian troops are retired behind the river Unstrut, taking up a defensive position between the villages of Thamsbrück, Merxleben, and Nügelstädt, so as to be ready to receive the expected attack either from the direction of Gotha, of Eisenach, or of Mühlhausen. They retire there on the night of the 26th, having expected throughout the day to receive an attack from the troops of General Flies, which had advanced from Gotha as far as Warza; but on the 26th they receive no attack, and it is not till the 27th that the battle of Langensalza takes place.

It so happens that although there were 12,000 troops at Eisenach and 8,000 at Gotha, only the 8,000 at Gotha attacked the Hanoverians on the 27th. The authorities at Berlin (this I take again from the Prussian official account) had received information on the 26th that the Hanoverian Army was retreating in a north-easterly direction. This was probably due to its movement of retiring from Behringen on Langensalza and behind the river Unstrut. They accordingly telegraphed to General von Falckenstein at Eisenach, and to General Flies at Gotha, that they were to put themselves on the traces of the Hanoverians. At the same time General Falckenstein had reason to believe that the Bavarians were commencing to make a northward march; he therefore sent a detachment of his force as far south as Vacha, and kept the bulk of Goeben's and Beyer's troops about Eisenach; but he sent large reinforcements to Manteuffel at Göttingen, who was ordered to move on Mühlhausen and cut off the retreat of the Hanoverians, at the same time that General Flies was to continue on their traces.

It resulted from this, that on the morning of the 27th only Flies with his 8,000 troops advanced against the Hanoverians. Advancing in the early morning, the 8,000 infantry of Flies, of which about a third were landwehr, with 22 guns, of which six were rifled, and only three small squadrons of garrison or landwehr cavalry, encountered the Hanoverian outposts towards half-past eight o'clock, and very soon drove them in through Henningsleben and through Langensalza, till they had reached the purely defensive position taken up by their army behind the river Unstrut.

Before I proceed to say anything about the actual facts of this battle, I would wish to remark that it has been made so much a theme of controversy, and has been so often used as a proof that the Prussian system of tactics is bad, in consequence of the way in which the Prussians certainly failed in this battle, that I think it may be desirable for me to state very briefly what appears to be the true Prussian system, that is to say, the true perpendicular order of attack of which we have heard so much; and then we shall see, as we examine the facts, how far the real spirit of that perpendicular order of attack was adhered to,

and how far it was departed from, in almost every particular by the General in command of the Prussian troops.*

The perpendicular order of attack appears to me to be in its true spirit this: that an advanced guard goes to the front, reconnoitres, spreads out, feels the enemy, ascertains which are really the weak points, and on the principle of engaging as few troops as possible, and getting as much out of them as possible, very often engages in a very severe attack, and very often bears the brunt of the battle. In fact, we know the French critics say that one great fault of the Prussian perpendicular order of attack is that too much is required from the advanced guard. The main body follows, not necessarily so near as to be involved in the attack of the advanced guard, but so near that when the advanced guard has found the weak points, it may attack with its fresh unbroken masses upon the point selected; or following out (and this, I believe, was very frequently done during the late Prussian manœuvres) the system of flank attack, while the advanced guard continues its front attack, the main body moves round to the flank and endeavours to outflank the enemy, so that the attack of the advanced guard becomes a feint. Then comes the reserve. The troops of the reserve should be held in hand by the Commanding General, so that they may be used, if necessary, to complete the decisive shock at the right moment or to cover the retreat. The Prussians recognise that there must be occasions on which troops must be detached from the reserve to cover the flanks, or for some other purpose; but I believe they recognise that every such detachment from the reserve is an evil, and is to be avoided, if it be possible.

Now, General Flies on this occasion was about to attack with 8,000 troops some 20,000 Hanoverians, in order to hold them in position, and prevent their escaping northwards. He must have known that it was almost impossible for him to gain a victory, and that he was extremely likely to have to experience a retreat. It would occur to most soldiers that, under those circumstances, the point of the greatest importance would be to hold in hand a reserve ready to cover that retreat.

Let us examine the actual events of the battle. By nine or ten o'clock the Hanoverian outposts having been driven in and across the river Unstrut (of course it will be impossible for me in the time at my disposal to go into all the details of this battle), the advanced guard of the Prussians is sent forward. It is a very small advanced guard, comprising only the eight companies of the two battalions of the troops of Saxe-Coburg-Gotha, a squadron of landwehr cavalry, and a battery. Four companies of it occupy Langensalza, four companies more, occupy the hill known as the Jüdenhügel. The advanced guard does not spread out to any considerable extent, it does not to any extent reconnoitre the position. Meanwhile the main body has been deployed behind the Jüdenhügel, while the reserve has been deployed near the Siechenhof, and so little are the true duties of the advanced

* I have partially availed myself here of the valuable criticisms of the anonymous author of "*Tactische Rückblicke*;" and I have derived great assistance in analysing this battle from some notes with which I have been favoured by Major Colley, 2nd Queen's Royal Regiment.

guard performed, that we find the first troops to advance against Merxleben, which is the key of the position, are companies of the main body, followed by troops of the advanced guard.

I must here say something about the battle-field. The river Unstrut has been artificially straightened and embanked in its course from Thamsbrück to a point some hundreds of yards below Merxleben. There were at this time some four or five feet of water in the river, which has steep and high banks. There is then a flat space of meadow land from 40 to 50 feet on each side, and then a bank of about four feet high, so that each of these dykes forms a parapet. You have, in fact, a double line, and troops standing behind either embankment can make it almost impossible for troops to cross from the other side. This obstacle had a very great effect upon the battle. At Merxleben itself the river has two courses. There is the old curved course of the river through which the water continues to flow, while the new course of the river is almost entirely empty. There is a bridge over each, and a causeway between. Then there is a long raised causeway south of the bridge over the new channel running for about 200 or 250 yards beside the Salza, so that it is almost impossible for troops, in the face of a heavy fire, to pass such a defile as this. Yet the only places by which the Unstrut could be crossed, except through the water, were this immensely difficult defile at Merxleben, or the bridges at Nägelstädt or at Thamsbrück.

Now, the Hanoverian troops were posted, one brigade at Merxleben, one near Thamsbrück, one near Nägelstädt, and one in reserve behind Merxleben. As Flies' attack gradually developed itself against their position, the brigade Bothmer from Nägelstädt was drawn in to its right; the brigade Bülow, from Thamsbrück, was drawn in to its left, and the greater portion of the reserve artillery, and the artillery of De Vaux's brigade, was placed on the hill known as the Kirchberg, to reply to the Prussian artillery, most of which was posted on the Jüdenhügel. We find that, by one o'clock, while the Hanoverian troops are acting purely on the defensive behind the Unstrut, General Flies has sent three companies, one from his main body, followed by two from his advanced guard, with half a squadron of cavalry, to occupy the village of Thamsbrück, more than a mile and a half away from the main body, in order to prevent his left being turned. He has advanced a portion of his skirmishers along the Salza, a stream which flows into the Unstrut opposite Merxleben. But they have been unable to make any way beyond the Salza, because the flat meadows between it and the Unstrut are swept by the fire of the Hanoverian skirmishers, and also by a battery of Bülow's brigade, which has taken up its position to the north-west of Merxleben. Flies has occupied Kallenberg's Mill with two companies of his main body, and the greater portion of his main body is thrown into the wood known as Badewäldchen (Bath Woods), and into the buildings of the adjoining bathing establishment, where patients resort to be cured by mineral springs. It appears evident to me that the troops made their way of their own accord into these Bath Woods, as being the only place where they could obtain cover at all within reach of the Hanoverian position.

The skirmishers have been pushed on, and they line the dry ditch which runs in front of the Badewäldchen; a few of them have run along under the shelter of the causeway by the mill, and have lined the bank of the Unstrut on the near side. But they have been unable to make any sustained effort to cross the Unstrut. The only effort that was made was by the rush of one company, which tried to storm the barricaded bridges and cross at Merxleben, and which failed signally. There was no such sustained attack by the main body as, it appears, should be the object of a main body, if it engage at all seriously with the enemy.

We now come to this still more important point, that the reserves have been all sent to the extreme right of the line, to occupy the spur known as the Erbsberg, because it was evident that the brigade of General Bothmer was about to attempt the passage of the river opposite to that point. Thus, although a mass of troops from the main body is crowded uselessly in the Badewäldchen, the reserve is taken to oppose this flank attack on the right of the line. The result was that no reserve was left at one o'clock in the day, although as yet the Hanoverians had not a man across the river.

At one o'clock it appeared to General von Arentsschildt that it was time for him to pass from the defensive to an offensive movement; and now this river Unstrut, which has hitherto been so difficult an obstacle to his enemies, becomes just as difficult an obstacle to himself. He gives orders to Bülow's brigade on the right, to De Vaux's brigade in the centre, and to Bothmer's brigade on the left, to attempt the passage of the river. General Bothmer's brigade, opposite the Erbsberg, rushes down to the river, and attempts to cross it. The men are armed with the old muzzle-loading rifles, and have paper cartridges, and the river is four or five feet deep. In crossing the river, the first troops get their ammunition wet, and when they get across, are unable to use their rifles. Almost decimated by the fire of the Prussians, they are obliged to retreat. A second battalion attempts the passage. They hold their ammunition above their heads; but they get the water into the barrels of their rifles, and they are almost as helpless as the others. At half-past one General Bothmer is obliged to abandon the attempt to make the passage at this point; the natural obstacle and the fire of the enemy are too heavy for him. But the brigade Bülow, on the right, succeeds in making its passage. It crosses the river, which is not so difficult at this point; it presses on and drives back the Prussians out of the buildings before Langensalza, storming them in succession, with very heavy loss; it drives the enemy back on the Salza; it enters the town of Langensalza; and its troops take in flank the guns of the Prussians on the crest of the Jüdenhügel. These guns are outflanked, and the only escort they have, being three small companies from the advanced guard, they are of course obliged to retire. The Prussian defenders of Kallenberg's Mill are at this time driven out by the guns on the Kirchberg; they make a rush across the road, but being outflanked by the Hanoverian Guards, who have crossed the Unstrut just above Merxleben, and reached the Salza, while some of them succeed in

crossing the road and entering the Badewäldchen, some of them run back into the mill, and are taken prisoners. But a portion of them succeed in making their way into this already overcrowded wood, upon which the Hanoverian guns on the Kirchberg are now able to direct their whole fire, the guns on the Jüdenhügel having retired.

Before this time General Flies appears to have given orders that the reserve troops, which had been placed on the right under the command of General Seckendorf, should retire from their position on the Erbsberg, and they have already retreated and joined the troops from the Jüdenhügel, south of Langensalza. Yet, at four o'clock in the afternoon, no order to retire has reached the troops that are left in the Badewäldchen, who are now completely outflanked by infantry on their left, while some of the reserve cavalry have pushed on across the Merxleben defile, though not without considerable difficulty and delay, caused by their becoming jammed at the bridges. And now only the order reaches these troops in the Badewäldchen to retire, while the Hanoverians are pressing on against them in front and flank.

The retreat having fairly commenced, the infantry of the Hanoverians cease to have much power, and the pursuit, as I suppose will always be the case, is entrusted to cavalry. And now occurred that remarkably interesting series of cavalry charges which have formed the text for so many comments. But I should first say that comparatively early in the day the regiment of Duke of Cambridge Dragoons, which had been attached to the brigade in the centre, had moved round across the bridge at Nügelstädt, and having watered and fed the horses, had actually got into the rear of the Prussian troops. There is some little discrepancy in the accounts of the Prussians and of the Hanoverians as to the charge which first took place on the artillery. The Prussians say that a rifled battery of theirs was in position close by the Siechenhof; that this regiment of dragoons appeared on the point of charging the battery, but that the battery fired into the dragoons, and that they retired, losing a captain in the charge. The Hanoverians do not mention any such charge as that, but they do mention losing a captain in a charge (which, according to the Prussians, was their second charge), upon two guns which had retired with Seckendorf's reserve from the Erbsberg and were moving towards the south-west. Through these guns the Hanoverian cavalry rode, and the guns were captured, and not retaken by the Prussians. The Prussians say that those two guns were taken because their horses took fright during the charge, and fell into a ravine. Be that as it may, for it is almost impossible to decide disputed questions of this nature, at all events those two guns were captured by the Duke of Cambridge Dragoons, and remained as trophies in the hands of the Hanoverians.

Now, as the troops are pouring out from the Badewäldchen, some of the Hanoverian reserve cavalry have moved across the eastern slope of the Jüdenhügel, and are capturing numbers of Prussians as they run in broken order and confusion out of the wood. But the greater portion of these troops in the Badewäldchen succeed in forming themselves into two masses, composed of men of almost every regiment

that had been engaged in the action; and these two bodies retreat with the view of joining the rest south of Langensalza, on the Gotha road. The Duke of Cambridge Dragoons appear on their left flank as they move in this direction, and they form two squares, about 700 paces apart, on the upper and middle Illeben roads. The Hanoverian Life Guards had moved past the Jüdenhügel down towards the north of these squares, and charge the western square. Two squadrons charge in line upon the north face of the western square, of which less than half the men were armed with breech-loaders. Then happened, what Sir Shaw Kennedy tells us occurred over and over again at Waterloo, that which Marshal Marmont says is likely always to happen, the cavalry did not ride straight at the square, they open out to the right and the left, and passing by the flank of the squares they receive two withering volleys, which brought to the ground two of their officers, a twelfth of their men, and a fifth of their horses. The regiment retires to reform, and this column passes on to rejoin the rest of the retiring Prussians unmolested further.

But the eastern square was not so fortunate. There is great difficulty in ascertaining what occurred in one particular here. The Prussians say that the Colonel in command of this square mistook the Duke of Cambridge Dragoons for Prussian cavalry, and rode out to them. The Hanoverians say that the Colonel rode out and offered to surrender this square, but that when he heard the firing of the western square he changed his mind and rode back to his command. But this certainly happened: when he rode back his square was charged at the same time on the north and west faces by two squadrons of the cuirassiers of the Hanoverian Guard; one of them riding at the north face, and the other squadron coming down in the same direction, and then wheeling to attack the west face. Again, what was the result? The squadron advancing towards the north flank of the square meets such a fearful fire, (this square had nearly all breech-loaders,) that four officers are shot down, and the squadron passes off to right and to left; that portion which passes off to the right rides into the other squadron which is wheeling to attack the west face of the square, so that the charge on the west face did not come off. The square in this way has for the moment been successful. But almost at the next moment, (there is no doubt there was the keenest rivalry between these troops, that the one regiment of cavalry was trying how it could possibly outvie the other in deeds of gallantry,) at that moment there comes down on the south flank of the square a charge from the second squadron of the Duke of Cambridge Dragoons, and they ride straight as a line at and into the square. In that charge every officer of the squadron fell and one-third of the men. They ride into the square, they penetrate it; but I believe there is a great difference between a square being penetrated and being broken. There is no doubt that the square was not broken by this charge, and that it remained on the ground. No sooner has it partially recovered from this shock which it has received, while the squadron has retired to re-form, than it receives another charge from the cuirassiers of the Guard, whom it has once repulsed, but who will not be outdone by the Duke of Cambridge Dragoons, and who again

resolve to attack, though with only three officers left. Again they charge the north face, and several of them penetrate into the square. A standard-bearer of that regiment fought his way out of the square after his horse was killed, carrying out his standard; and I believe other troopers did the same. Yet I believe, although it is very difficult to ascertain the exact truth of these accounts, that the square was not permanently broken. The Prussians say they re-formed immediately with the utmost coolness; and there is no doubt, from the Hanoverian account, that they were not permanently dispersed; for it speaks of two guns of Horse Artillery having now at last succeeded in getting over the ditches by which they had been delayed, and firing at 900 paces upon this square which was now retreating westward. At the same time the Hanoverians say they captured large numbers of prisoners, whom they call remnants of this square.

That was the last scene of this battle. The Prussians, covered by their artillery, drew off in the direction of Henningsleben. The young Hanoverian officers were eager to pursue, but it was almost impossible. The horses were utterly exhausted, while many of the men had had no food that day, for the action had begun before they cooked; and it was one of those hot, sultry days in which every movement made by the troops was a burden to them. The Prussians tell us that they lost scores of men, who fainted under the heat, before they reached the Badewäldchen. The Hanoverians had lost in the action no less than 32 Officers and 342 men killed, and 70 Officers and 981 men wounded. In De Vaux's brigade the infantry lost 24 Officers and 492 men; and the Duke of Cambridge Dragoons, out of a total strength of 276, lost 5 Officers and 51 men. The Prussian losses are stated officially to be 41 Officers and 805 men killed and wounded; and the Hanoverians say that they took prisoners 10 Officers and 897 men.

That night the King of Hanover applied for a truce to bury the dead; it was refused by the Prussian General. The Hanoverians threatened to attack Gotha, and again offer to treat on the condition of free passage to the South, not bearing arms against Prussia for two months. Flies said he must telegraph to Berlin. By 9 A.M., on the 28th, the answer was returned. Berlin refused to negotiate at all. Von Moltke telegraphed to Falckenstein to concentrate every man, and force the Hanoverians to surrender. Gœben had moved on Gotha. Beyer arrived in the course of the day. Manteuffel had drawn his forces round the ill-fated army to the north and north-east, and by nightfall of the 28th, they were indeed surrounded by more than 40,000 troops.

During the day there had occurred in the Hanoverian camp one of those events, whose intensity, they who lead calm lives can scarcely appreciate. A council of war was held, and it was declared by the Commander-in-Chief and the Generals of the Hanoverians, on their honour as soldiers, that it was impossible for the army to make a further stand. The Hanoverians had no provisions, no commissariat, no ammunition; both men and horses were weary and exhausted; and they said, therefore, that it was better for the King to seek for a capitulation, in order to save further and unnecessary bloodshed. Then there was issued that document,

that one knows not how to read without emotion, in which the King, already so heavily stricken in his blindness, relates to his soldiers this statement of his Generals, and says, that though it has pleased Providence to lay a heavy affliction upon himself, his house, and his army, yet he can look back with pride to this day as worthy of the old memories of his race, and will leave the future in the hands of an Almighty and a merciful God.

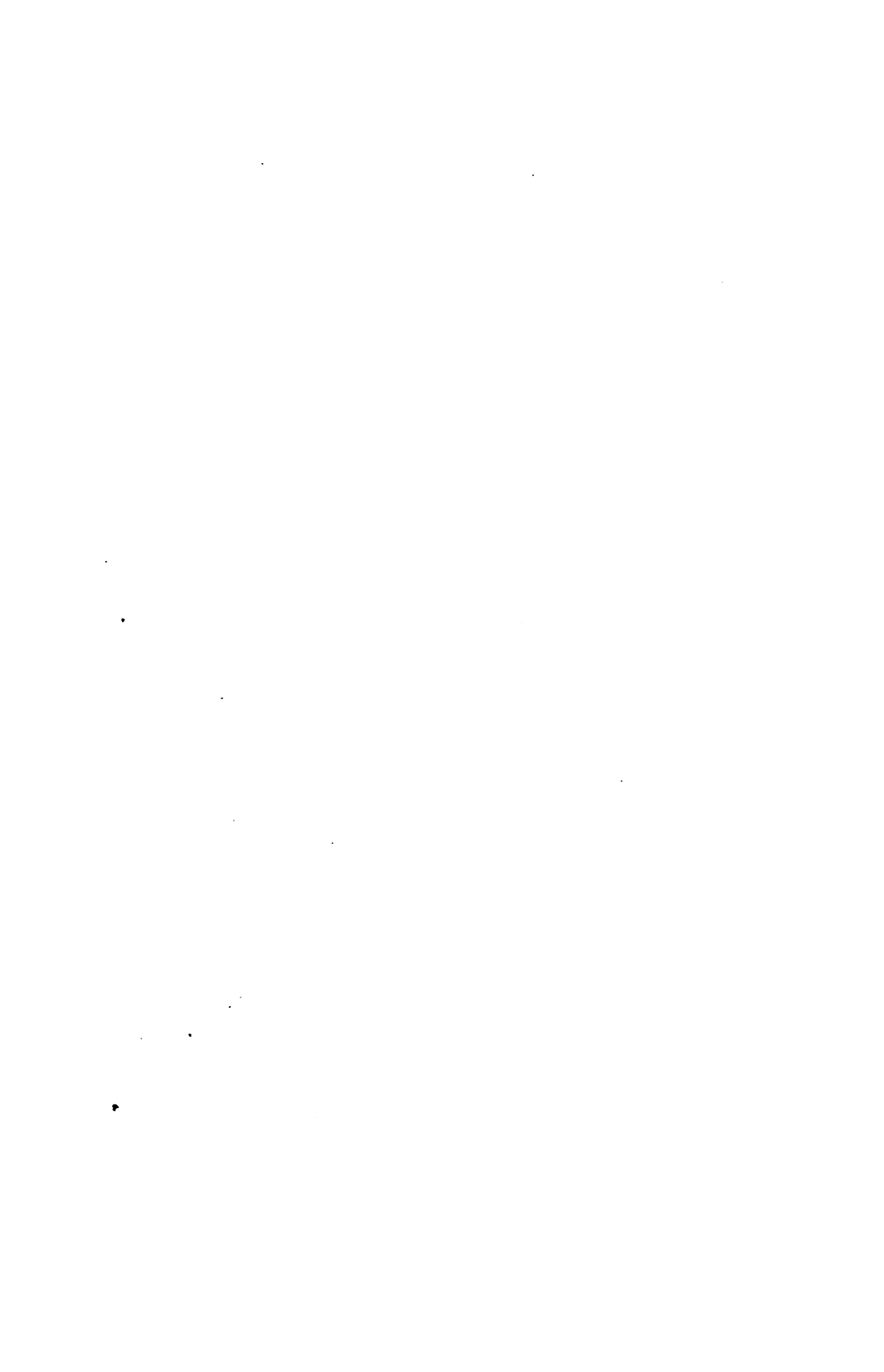
The next day the capitulation was signed. The Hanoverian troops were sent back to their homes, bound not to serve against Prussia. The Hanoverian Army was "got rid of." Twenty thousand men were struck off the roll of Prussia's enemies. Falckenstein was free to turn to the south against his other foes; and Hanover, as an independent kingdom, was wiped out of the map of Europe.

Your Royal Highness, it only remains for me to thank you for the great honour you have done me in presiding here to day, and to say to my audience, among whom I see many who will look at this subject from other than the strategical and tactical points of view, that I hope they will carry away, at all events, this one lesson,—an old lesson re-taught by the last campaign of Hanover,—that you cannot arm and recruit in the moment of emergency; and that a nation which in time of peace enters upon the career of reducing its trained forces, above all its special arms, its cavalry and its artillery, may have to pay in bitter humiliation, and in the life-blood of the bravest of its sons, a price, compared with which in that moment, the very last coin in its exchequer would weigh but as a feather in the balance.



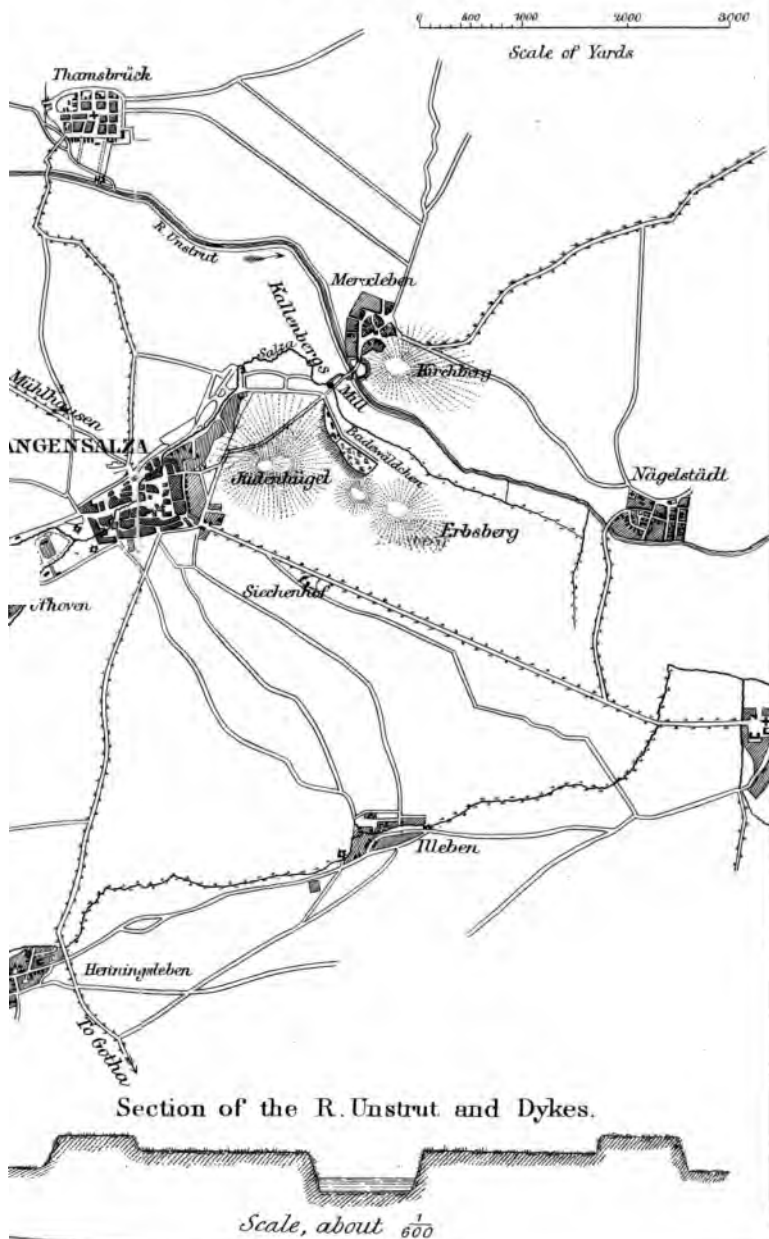
Sketch Map
THEATRE OF THE CAMPAIGN OF 1866
IN WESTERN GERMANY.





BATTLE FIELD OF LANGENSALZA.

27 June 1866.





MILITARY ESSAYS AND REVIEWS

By X.

TO BE CONTINUED.

PART I.

(MARCH 1st, 1871.)

ON CAMPS OF INSTRUCTION AND MODERN
TACTICS.

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IN future publication, the symbolical unknown (X) may represent more than one individual. The Author will gratefully accept assistance from soldiers who look upon the army as their profession, and who share with him this opinion, viz. :—

It is expedient to make the best of what the Legislature provides. Cordial co-operation tends to union and strength, whilst factious opposition begets discord and weakness.

The Military Essays and Reviews must, therefore, aim at strengthening the powers that be, by fair argumentative discussion.

MILITARY ESSAYS AND REVIEWS.

INTRODUCTION.

A CLAUSE in Her Majesty's Speech from the Throne runs thus:—"The lessons and military experience afforded by the present war have been numerous and important. The time appears appropriate for turning such lessons to account, by efforts more decisive than heretofore at practical improvements."

The author considers it hardly necessary to warn readers of his anonymous pamphlet, although sensational in its title, that they must expect nothing revolutionary.

The Government of the country decides that no extraordinary administrative effort, interfering with the liberty of the subject, is called for. The Secretary of State for War declares his intention of defending the country with the constitutional armament. It, therefore, behoves officers of the army to strengthen the hands of their rulers, by

making individual efforts tending to compensate numerical weakness; and this can be accomplished by simply raising the standard of efficiency. The material and the matériel of the British army, Militia, and Volunteers are excellent; the military want of the nation can be expressed in one word, *education*; and in the humble opinion of the author, this want pervades every rank. Instruct the officer, and let the officer instruct his men; not the officer joining the army to-morrow only, but let the veteran arise equal to the emergency, and hold his command over intelligent subordinates, by right, in place of by sufferance; in other words, let knowledge be his source of power.

Her Majesty calls attention to the present war—happily at this date the past tense can be used. Now what great lesson has the campaign of 1870 taught? History will prove that Germany did not vanquish the greatest military power existing through preponderance in numbers so much as through an omnipresent superiority in education.

Lavallée, two years ago, prophesied that “le savoir géographique” of the Germans must always prove a serious danger to France. The author understood the full force of this remark for the first time when two private soldiers of the Prussian army convicted him of error by an appeal to their pocket-maps, more perfect in detail than the best which could be procured for money in the neighbourhood of Charing Cross. When the late

war broke out, the author chanced to be near the head-quarters of our army, and, anxious to study a good map, entered the Quartermaster-General's department. A clerk was sent round the corner to buy one.

Perhaps there is no greater want in the British army than the habit of using maps. The *savoir géographique* of England's soldiers is certainly no menace to foreign powers.

It has often been said of inventors, that more credit is due to them for discovering a common want than for contriving mechanical means of supplying the deficiency. Therefore, the sole aim of the author is to point out common military wants. They are as obvious as the need of a lever to draw a cork, or perforating machines to disintegrate sheets of postage stamps, ever was in everyday life: it remains to be seen whether means as simple are forthcoming to satisfy those wants.

Part No. 1 calls attention to the want of sound thorough teaching in a camp of instruction. As an instance of what can be learnt during peace manœuvres, in the way of control organisation, note the march of Prince Frederick Charles's army at a critical moment on Fontainbleau. The march took place immediately after the fall of Metz, in an echelon of corps d'armée, and the army marched too fast for its commissariat, say twenty-five miles per day. An order was issued

at Versailles, that the Etappen Chief of the Crown Prince's army should till further orders also supply the army of Prince Frederick Charles. Neither the men nor the horses starved.

Why can't the division at Aldershot march down to the New Forest and back subsisting on the supplies of the country?

Part No. 1 closes with a desultory discursive chapter on tactics, carrying the reader up to the end of 1866. On another occasion the author proposes to investigate the tactical phenomena of 1870, and also, if possible, provoke a tactical discussion concerning the British battle formation.

The author is of opinion that this country can learn little from Continental armies in artillery or cavalry (education of the officers of the latter branch excepted), save the advantage of numbers and boots.

CHAPTER I.

CAMPS.

IN peace time, camps are formed to provide instruction in the requirements of war. It follows, then, that camp-life must differ materially from barrack-life. In camp, the system of provisioning, of supply, and of transport, must be identical with that of a campaigning army, in order to familiarize all ranks with the circumstance of actual service. A camp must be a vast school, in which the listlessness of the amateur gives way to the zeal and earnestness of the professional, and a school affording education in every branch of military art. When dismissal from parade is the signal for a general "exodus" from camp and its influences, there is *primâ facie* proof that a camp fails in its object. The commandant has not introduced a system calculated to enlist the intelligent interest, or even the sympathy, of his subordinates. No one can argue that in the year 1871 military science affords no field for deep reflection. Strategical principles, it is true, stand fast, but the introduction of a new weapon has

caused a revolution in tactics ; and as England has taken no active part in recent wars, no officers in her army can pretend to more than a theoretical knowledge of their profession.

Intelligent teaching, based on careful study of the phenomena presented by the military experience of Prussia, Austria, and France, is urgently required. The attention and co-operation of subordinates is easily secured by enlightened instruction ; but as long as men are looked upon as portions of a mechanical system, their muscular powers will be at the service of the State, but not so their mental energy. Why was the old-fashioned Divisional Field Day so irksome and tedious to the mass ? Simply because the meaning of manœuvres (if any existed) was a secret to all but commanding officers, and no time was ever granted for explanation. It was considered more important that the men should dine punctually at one o'clock, according to routine, than that officers and the troops should be interested in their work. A camp is no place for routine, and under command of an enlightened, progressive tactician every individual in the division should understand that *his* effort is essential to secure the general object in view. Up to the present date no book has been published authoritatively on the subject of attack and defence, and it may be said that no ground has been placed at the disposal of a commandant with the varied features necessary

for a simulation of war ; but have we not reached an age of reform ? Doubtless, when the army is re-organised, these and other obvious wants will be supplied.

Other new matter demands the earnest attention of a Camp or Divisional Commander in addition to tactics. The force entrusted to his care should be complete in detail. It should be ready to take the field, and if, perchance, sent on service hurriedly, the responsibility for any shortcoming could not be thrown on any department, but must rest with the chief. He would in vain urge, for instance, that his authority over "the Control" was nominal, and that no opportunity had been given him of testing the serviceableness of equipment, of inspecting stores, of learning proposed arrangements for the comfort of sick and wounded, of the system of transport, &c. The country would not be content with the excuse. "The Control" department over-rated its strength, and is unequal to the emergency—for this simple reason—all weakness should have been discovered and corrected in camp ; a chief must be acquainted with the working of his non-combatant element ; the executive must aid the administrative by a bold statement of facts. The cry of the public in this instance would be, "You had warning ! The model from which your centralizing system of "Intendence" was derived has proved a gigantic failure ! You were in a position to give that

system a searching test. If not satisfied, where is your protest?" If a protest has been made to the administrative through the proper channel, the Chief possibly possesses a clear conscience; but he is not a great man, nor does he deserve well of his country, without making himself felt in a matter of vital importance. The question is not only a military, it is a national, one! Much care and attention have been lavished on the all important Control system, which is by no means a slavish copy of the French. The Intendance broke down disastrously in its medical code of laws, for instance. Our medical officers do not belong to the Control. In practice it will be found that the Controller is only too anxious for the supervision of the Combatant Commander, and that the chief danger to the system is a disinclination on the part of general officers to accept their position as Control Commandants.

The difficulty of finding a theatre for practically testing departmental skill again presents itself, and one is fain to own, that, little short of the scale of Prussian peace manœuvres would suffice for the purpose; but why not march troops across country after harvest, making good or paying compensation for accidental injury committed? To call a Divisional Field Day, on a sandy waste, or a bowling green, or along turn-pike roads, a simulation of war, where the

troops may not deploy, and are not hampered with non-combatants or baggage, is an obvious and a mischievous deception; and the rapidity with which a force habitually falls back, according to programme, before an imaginary enemy is a most dangerous precedent. Non-combatants require drill as well as combatants. A system of Field Hospitals is wanted. A mode of preventing a combatant line from melting away, from the benevolent desire of able-bodied men to bind the wounds and otherwise take care of their maimed comrades, should be established. The position of first reserve of ammunition should be determined, and the form of issuing a few rounds gone through. These minutiae seem of small import, but an absence of system would soon tell its tale on actual service.

The Divisional Commander must be a man of distinguished energy, and ability, a man of progress, a man capable of rising superior to the narrow-mindedness of military habit, a man able and willing not only to detect, but eradicate imperfections and weaknesses; and his first care should be to instil like qualities in the Generals commanding Brigades, who in their turn must fight and conquer the prejudices and time-honoured traditions of regimental routine. This alone will be no easy task. The inspection of a regiment must be far less superficial in the day

when officers are called upon to cultivate their own understanding in things military, and to be self-reliant. The habit of a Commanding Officer governing through his Adjutant is most pernicious. The position of a Captain must be what the word implies, and not a mere sham. The chain of responsibility must be maintained in every link; and Brigadiers must personally ascertain that Lieutenant-colonels delegate authority according to the spirit of Her Majesty's regulations, lest the day arrive when the centralisation of power prove the ruin of the combatant, if not of the non-combatant element.

It is worthy of note that some of the most lax and careless Captains become very zealous Lieutenant-colonels—and why? Because their intellect finds no scope till they possess the reins of government. The Lieutenant-colonel then commands the whole regiment directly, or through his adjutant, and the Captain seeks mental occupation out of uniform.

Lastly, the aid and protection of camp commanders are invoked for garrison instructors. The appointments are an anomaly, but also a necessity. There is every reason to imagine that senior officers will now educate themselves up to the standard required of juniors, so that progress in the service may be possible before the present generation passes away. The day may not be

far distant when Regimental Field Officers will undertake the charge of educating their juniors. This much is problematical, but that the rate of progress will be in proportion to the vigorous efforts of a supreme commander is an indisputable fact.

CHAPTER II.

TACTICS.

THE preceding pages have been devoted to an enumeration of the most pressing cares, difficulties, and responsibilities of an officer undertaking command of troops in a camp of instruction.

This chapter is a contribution to discussion on modern tactics, which ought to be provoked in order to ventilate the subject thoroughly.

It is very difficult to wean old soldiers from a system they have been nurtured in ; and when the practical test of a system has resulted favorably, old soldiers carry out the conservative principle of letting well alone.

The British army made rapid progress in military art at the commencement of the present century. It may be said that we took a step in advance of Continental armies. Line formations were probably first introduced in consequence of the numerical weakness of British forces ; but thanks to the splendid physique, coolness, and bravery of our infantry it became the regulation order of battle—more than that, by Sir John

Moore's advice, ranks were reduced from three to two deep. Now, if fire-arms in the day alluded to had possessed long range or accuracy, Continental nations must have either copied our tactical order or have met British troops at a great disadvantage ; but fire-arms could only be relied on at very short ranges, and from their want of accuracy men were trained to fire "straight to their front." British infantry was more renowned for reserving its fire till in contact with its enemy, and charging with the bayonet, than for a quick, well-directed fire from its deployed line. This increased development of fire was by no means thrown away ; on the contrary, it was husbanded by keeping up perfect alignment and regulated intervals, so that no shot might stray from the intended direction—viz., the imaginary line at right angles to alignment, or be lost by the overlapping of battalions. Still if a position had to be "carried," the bayonet was the only weapon believed in by British commanders. Hence it happened that our great instructor and master, the Duke of Wellington, was averse to the introduction of rifles. Sir Charles Napier predicted the ruin of the British army if men were taught to trust in the efficacy of fire-arms, and lost the habit of closing with their enemy ; and still more recently a great tactician, Lord Clyde, was with difficulty brought to believe in the superiority of a highly-finished firearm of precision over the rough smooth bore—so hard

is it at an advanced age to eradicate the impression of a life's education. But in justice one must remember also, that the rifles first invented had their weak points.

It is a strange reflection that the first blot in our soldier's education was hit by a tribe of savages, and that a severe lesson, learnt at the Cape of Good Hope at a heavy loss, was actually repeated by another tribe of savages in New Zealand. In each instance for a time British troops entirely lost their prestige—their education was at fault. The individual soldier was a perfect piece of mechanism, but the machine had to be disintegrated—in other words, the serried rank had to resolve itself into intelligent skirmishers, and till these could be trained the savage triumphed. At the Cape, as usual, men rose equal to the occasion. Notably Sir W. Eyre introduced a most enlightened light infantry drill in the 73rd Regiment, but radical faults are not to be corrected in a day. Subordinates, when once taught to obey, mechanically understand that their mental energy is purposely restricted. To call on them suddenly to think, is like calling on the bedridden to walk. The reverses met with in New Zealand are not so easily accounted for, but the vital want was intelligence on the part of company officers and men. In a bush fight the best armed and the most intelligent skirmishers should win the day. The British did not always win the day, though decidedly the best armed.

Of late years the introduction of breech-loading small arms, and a marked improvement in artillery, has obliged our army, in common with Continental armies, to look upon skirmishing as a most important exercise; also especial attention has been paid to musketry instruction, after the model of France and Prussia; and in 1870 the Regulation Drill-book was revised and simplified.

The Prussians and Austrians, in 1864, joined in a military promenade against the Danes, who, of course, could only make a faint show of resistance. On this occasion the Prussians tested their needle-rifle. The old conservative officers of Austria did not acknowledge its superiority to their firearm; on the contrary, they voted it too delicate. In 1859 the Austrians attributed their signal defeat by the French to their having placed too much reliance in musketry fire. They, therefore, drilled their infantry to move rapidly in columns and charge with the bayonet. The Prussians arrived at a very different conclusion, and they slightly modified their battle order to develope small-arm fire. The rival systems were tried in 1866, and in six weeks the Austrian army was annihilated by the Prussians. The Prussians still attacked in columns theoretically; but practically they gave full scope to the power of their needle-rifle, by a lateral extension exceeding that of the British line formation.

The tactical order of battle was a first line in

company columns, a second line in quarter column of double companies, and one or more reserves. On parade the company columns (250 strong, with five officers) stood in three ranks, the rear rank consisting of picked men for skirmishing. The rule in peace time was that about a quarter of the rear rank should skirmish with the rest in support, and the skirmishers were to be reinforced as occasion required. The company was commanded by a captain, who was mounted, except when under serious fire. The men had been carefully instructed in musketry.

The three recognised modes of firing were: first, skirmishing, in which a man took deliberate aim from behind cover; secondly, volley firing by word of command, which was for ranges between 800 and 300 yards; thirdly, quick fire for point blank range. Volley firing was believed to be most effective, and precautions were taken to prevent waste of cartridges.

The captains of companies in the first line were as independent as commanders of ships. The company line advanced, covered by skirmishers (more or less according to regulation), but when the enemy was within range, in place of the skirmishers being recalled in order to fire volleys, by instinct the first line resolved itself into a swarm of skirmishers; the regulated supports even were in the general line more than this, the tendency of the advancing line was to outflank rather

than make a front attack on any point or points held in force by the enemy, and the whole extended laterally. About this period, the columns of the second line suffered loss from the Austrian fire ; and we are told that by companies it filled up the gaps in the first line, till the officer commanding the first line found his strength doubled, whilst nothing but his staff remained with the officer commanding second line. The latter could now do no more than form stragglers and the superabundance of troops into supports, as opportunity occurred. But with a reserve intact, and strongly posted, the battle is not lost, the discomfited skirmishing line may fall back through it, and rally under its protection : the reserve may fight an offensive defensive battle, and become a skirmishing first line. In the campaign of 1866 the first line had not to fall back. If any part of it was broken through by the Austrians, the advantage was neutralised by the deadly fire of breech-loaders on the flank of the Austrian column ; and it often happened that the reserves lost more men than the skirmishing line, from their dense columns offering a good mark for the enemy's artillery. The Austrian artillery proved itself more efficient and more enterprising than the Prussian ; but a battle is won or lost by infantry, and the tactics of the Austrian infantry were simply suicidal. Their columns were shattered and demoralised be-

fore they arrived within charging distance of the Prussians, i. e. about fifty paces ; and thus, it happened that at Sadowa—the decisive battle of the campaign—a column left its defensive earthworks (faithful to its teaching) 20,000 strong, and, in less than half an hour, lost quite one-third of its number.

Without entering into the strategy of either side, and putting aside the cavalry of both armies, which was hardly made use of, also allowing that in artillery the Austrians had some advantage, we are able to conclude that decisive victory remained invariably with the Prussians through their breech-loading fire-arm and the tactics employed to develop its power ; but these same tactics must needs shock our notions of good order and military discipline, and it seems that the Prussian leaders presumed somewhat on their superiority in weapons. The Prussian leaders can defend themselves, however, without argument ; they have only to quote their unqualified success.

The disorder amongst well-trained and disciplined men differed greatly from the disorder of a rabble ; it was the result of suddenly removing restraint from bands of intelligent, courageous men confident in their weapons. The column formation at once gave place to an extended irregular line. The deployment was a work of intelligent instinct, in place of book-learned me-

chanism. There was something risked, but not as much as we might imagine, because every captain was a first-rate soldier, and every private believed in his officers, especially in his captain. Had success been doubtful, the companies would have fallen back, and the general officers would have soon found their troops in hand. As it turned out, the companies for the most part won the battle.

Now, one would tremble to see an experiment of this nature tried with our army, for this simple reason—a captain to a British company or troop is something quite different from the officer commanding a German company. The German officer, in person, teaches the men all they know. He looks after their wants in quarters, holds the power of punishing all minor offences, and indirectly, through the commanding officer, rewards merit. It may almost be said that the British captain is educated in drill by his men. His authority is too often nominal, and he is too little used to independent action to act vigorously and without hesitation in a position removed from his superior's control. Again, the numerical strength of our company is not sufficient for independent action. No one can fail to understand the advantage possessed by a captain looked up to by his men, and believed in as the huntsman is by a pack of hounds. One can also understand that very few orders from the field officer reach the ears of

an officer in first line, whose attention is entirely taken up by his own men and the fire of an enemy. Still there are intermediate links between the lieutenant-colonel and the captain. If the battalion is too large for the command of one officer, diminish its numerical strength; but the vivid picture of a battle in 1866, as painted by the late author of the "Tactische Rückblicke," will find no admirer amongst our stolid infantry commanders. Supposing a battalion to supply its own covering skirmishers, if increased front of fire is requisite, the battalion leader can order it, provided he does not overlap the next battalion in brigade line. But this proviso just shows the necessity of ascertaining how numerous the skirmishers of the first line should be so as to lay down a rule on the subject. This question shall again be raised after investigating the tactics of 1870. At the moment we will confine ourselves to historical facts. After the Battle of Königgratz, when it took the best part of a day to sort the chaos of men in the fighting line, it is an undoubted fact that commanders of battalions were ashamed of their inability to keep their company columns in hand. That they took effectual precautions to clip captains' wings is proved by the absence of confusion in their next campaign. The Prussian regiments of the line have one uniform, with a distinguishing number on the shoulder, and this facilitates a habit "stray" commandants have of calling to-

gether stragglers of any denomination on the battle-field and commanding them. Something of this sort happened after the light cavalry charge at Balaclava on a most diminutive scale ; but this power might doubtless have its advantage where vast numbers are employed.

When company columns stand the test of two campaigns, and are still thought most highly of by, we may presume, *the* best judges, it behoves us to devote more than passing attention to the formation. Led by zealous officers, they ran away with victory in 1866.

The battalion commander was at the head of a kind of brigade, composed of four weak fractions; his duty was to remain well in rear, and if he issued any orders after the general object had been explained, it could only be done (when the action commenced) through his adjutant, or any other messenger. No trumpet sound would avail—each fraction sent out its own skirmishers, and to have halted any one company would have caused a gap in the line. The commander, then, had to be an almost tacit witness of the battle. He might from a commanding position give warning of danger unperceived by the fighting line, and he might apply to the second line for assistance, but he held no power of giving that assistance, and struggles are quick, sharp, and decisive now-a-days. Suppose that the commandant does ask for assistance, and a second

battalion advances to the fighting line, he can do no more than join one of his companies, for the Prussian rule is that any force launched against the enemy must be "used" up, and this rule explains how the regiments became so hopelessly entangled.

Commandants of battalions took care to issue from this false position during the breathing time between 1866 and 1870, and note—the fault was remedied by peace manœuvres. In 1870 we shall find, also, that artillery played an important part; but study of the modified tactical forms introduced, together with a comparison with our own forms, must be the subject of a fresh chapter.

Our last reflection on the campaign of 1866 shall have reference to the shortcoming in every branch of the Prussian combatant army, infantry excepted. Here was a long meditated, admirably-schemed campaign. The first of a series destined to raise and consolidate an empire of capacity and determination sufficient to rule paramount in Europe; and yet we find infantry alone, of her offensive weapons, equal to the emergency. A great statesman and a great strategist undertook to place the King of Prussia on a pinnacle of grandeur. How seldom is it that one country produces two men of such superb ability in one century? and how thoroughly nature seems to have been exhausted by the effort! Other nations,

indeed, have suffered from the talent lavished on the German race.

Count Von Moltke witnessed some service in Turkey (1828 and 1829), and is an instance of a heaven-born general. He has been educated in the School of Theory, and it would be a bold act to assert that a greater strategist ever lived. Still this great man falls short of perfection, owing to his never having served as a regimental field officer. For detail he is ever obliged to fall back on officers who have gone regularly through the mill ; and a merciful Providence ordained that no special interposition should be made in favour of the chiefs of all the different branches of the German service. They err like mortals.

This very fact may be a source of strength—who knows? Von Moltke is “ facile princeps ” of his army. The same might have been said of Wellington, of Napoleon, of Lee, &c.

The novelty of breech-loading fire was sufficient to demoralize the enemy in campaign No. 1, and the weakness of artillery and cavalry proved the mediocrity of their commanders, enervated by prolonged inaction. It also proved that the eye of the commander-in-chief had overlooked their deficiencies, and thus it must always be after a prolonged peace, without some active minds, backed up with sufficient authority, shake the comatose out of their comfortable bed of routine.

One would have been, indeed, surprised if the same disparity of talent had been exhibited by the three arms in campaign No. 2. Nor was such a contingency within the bounds of possibility under such a chief as Von Moltke. We shall find that artillery and cavalry made their effort in 1870—in-
fantry still marches in the van. One may safely prophesy that campaign No. 3, whenever it may arrive, will witness a still further improvement in field artillery, and a complete revolution in the tactics of cavalry. The martial instinct of the German race is fully roused, and, with Von Moltke as their chief, little short of perfection can arrest their progress.

A. I. Apple
MILITARY

ESSAYS AND REVIEWS.

By X. Y. Z.

TO BE CONTINUED.

PART II.

(APRIL.)

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DEFECTIVE EDUCATION—TACTICS, RETROSPECT
OF 1870—LIGHT INFANTRY.

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CHAPTER III.

DEFECTIVE EDUCATION.

ON the 28th March, 1871, a debate was provoked in the House of Lords of vital interest to the English army. A soldier of experience can render his country essential service by a straightforward expression of his convictions; therefore Lord Strathnairn did not hesitate to utter unveiled truth when rendering an account of his stewardship, as Commander of Her Majesty's Forces in Ireland. Education was defective, and the highest compliment due to officers might thus be construed—they mean well, but they are uneducated; it is their misfortune, not their fault! Then instances were quoted which, if looked at from his Lordship's point of view, completed the humiliation of the British officer—

“Eheu quanto mutatus ab illo . . . !”

The disciplined soldier labours under this necessary advantage—he may not use his power of defence against the keen cutting blade of a superior's tongue; hence it happens that credit for unwise intent is often given to officer and soldier undeservedly. Blame may be imputed to an officer

for not opening early and successive fire from the increasing front of a company formation ; yet the unexplained reason may prove a sound one, viz., that no enemy is in sight, and cartridges may not be wasted. Again, in the change of front on two centre guns of a battery, when opposing an imaginary enemy and when possessed of a limited number of rounds of ammunition, the Commanding Officer may pay undivided attention to the drill of his men ; but it is hardly fair to infer that the pivot gun would have remained silent on service where nicety of drill is not so requisite. It is quite impossible to lay down a law regarding early fire ; the position of the enemy alone guides the judgment of Commanding Officers. If an officer of forty years' or a private of four months' service made no use of the loopholes in a brick wall, when defending a fortified barrack, it is fair to infer that the individual was without ball ammunition. In the case quoted, no doubt, the Commanding Officer did not understand that the moment of actual attack was supposed to have arrived. Had Fenians attacked, the loopholes would have been manned by instinct, if not by reason. The weakest part of simulated war with an imaginary enemy is, that the imaginary assumes different proportions and positions in different minds.

Lord Strathnairn next alludes to the Curragh manœuvres, where the writer has learnt many a

useful lesson. At the Curragh Camp the Commander of the Forces gave proof of that talent and energy which alone have placed him in his present well-merited and exalted position. His quick glance and knowledge of detail detected error in every arm—so much error that, personally or through his staff, his Lordship was wont to dictate even regimental executive words of command, mistrusting every one. That this was no semblance of war probably none knew better than Lord Strathnairn; but what could be done with uneducated, inexperienced officers? A field day, in which the supreme commander takes personal command of each arm in succession, must be of a spasmodic nature; and centralization of authority is calculated to repress energy and reduce an intellectual being to the condition of a machine. Still no one will deny that there always was something to be learned from the Curragh exercises.

The British method of imparting military instruction is not a happy one, and differs in an extraordinary way from the German system.

Lord Strathnairn was reminded of his early German education by the campaign of 1870. Would that 1866 had induced him to teach the army in Ireland on the Moltke principle.

The German staff, including Field Officers, is educated by an argumentative reasoning process which appeals to the intellect; there is a total ab-

sence of brute force in the method of teaching. The instructor starts a proposition, and proceeds to a practical demonstration previous to establishing a dogma. An assertion must carry conviction. Why? Because no theoretical or practical objection can be urged against it. The teacher is only too anxious to raise an argumentative discussion.

In England the army system of education fails and is defective, because the intellect is not appealed to. The sledge hammer principle has been handed down from father to son, and the army is very conservative. Such and such an assertion is true. Why? Because I, the Commanding Officer, say so! Then follows that argument so necessary to discipline, and so unanswerable, "Silence, Sir!"

If the wrong key, or, even the right key, of a door refuses to revolve in a lock, an application of force apparently produces the desired result; the key revolves, but the door may not open, and the lock is certainly not improved.

The writer must not be accused of advocating the principle of argument taking the place of obedience. There is a time for all things. Before or after a Field Day, argument may be permitted. In the field an order cannot be too promptly obeyed. Instruction should take an argumentative form. Military art is not very abstruse; under certain given circumstances there

are not many different modes of arriving at a desired result; and these are all under control of general principles. If peace manœuvres are permitted in England on a useful scale, General Officers and their educated Staff should supply the strategical instruction excluded from our Drill-book. The Drill-book contains tactical forms which may not be altered. Strategy is too flexible to be thus circumscribed, although it is based on rigid general principles.

The German Drill-book is very comprehensive, containing strategy as well as tactics; but it was written a long time ago, and is not looked upon as the law of the Medes and Persians. The theoretical teaching of the German book would be of little use if not supplemented by the peace manœuvres. A book on strategy in detail is much wanted, but the absence of a field for practical instruction is a greater need. It is possible that one of Offenbach's operas may have had a civilizing effect in Germany, for the General Boum school has quite disappeared. A colonel passes his regimental guard the first thing in the morning, and he is saluted with a chorus of "Good morning, Colonel;" to which he responds, "Good morning, my children." This may have nothing to do with the question of education. The writer thinks otherwise. In a former paper the responsibilities of the chief of a camp of instruction were enlarged upon. In the author's humble opinion,

the nation ought to hold its General Officers responsible for instances of defective education. Then the nation must also provide a school, or the responsibility of a General Officer ends with a vigorous though unheeded protest.

The battle-fields of 1870 still render blood-stained evidence of modern military skill. Will no officers be sent from this country to learn lessons, valued at hundreds of thousands of lives and millions of money?

There can be nothing defective in this method of education.

CHAPTER IV.

TACTICS.—RETROSPECT OF 1870.

THE unqualified success of Prussia in 1866, and its political result, viz., the formation of a German confederacy, sufficed to excite jealousy, if not anxiety, in the most military nation of Europe. France could look with pride on her military history, and the mere notion of a rival was intolerable to the French army and its mancipated chief the Emperor. Those who foresaw that a struggle for the pride of place was inevitable between the Gallic army and the Teutonic race, predicted a fight of giants, nor was expectancy long deferred. In 1870 the French army was considered, at home and abroad, as powerful as its system of organization enabled it to become. Therefore, calculating on disunion amongst the German states, together with the unpreparedness naturally attending incomplete military reform, the French Emperor drew his sword.

The ready eagerness with which anticipated allies of France espoused the cause of Prussia or declared their neutrality, together with the tardy departure of Napoleon towards the scene of action,

ought, doubtless, to have made men's minds waver; but history must needs assert that sympathy amongst spectators leaned in a marked degree, at the onset, towards Germany, as the weakest and most inoffensive of the two belligerents.

The Prussians had been victorious in 1866, thanks to their breech-loading needle-gun! Had they not now to face a superior weapon—the chasseur? Had not French soldiers, man for man, always proved themselves superior to Germans? Had not the Frenchman naturally a martial soul? The German citizen hosts might be transformed from peaceful civilians to valiant soldiers, but years must first elapse. Thus argued the world, and thus it happened that, with few exceptions, its inhabitants calculated on a temporary if not a permanent triumph for France. And this, more pardonably, was the confident expectation of one of the two principals. At the end of a short campaign the Rhine was to have formed a French boundary, and a treaty to this effect was to be signed incontinently at Berlin.

The sceptical and cautious—for there existed some both in court and camp—could make no head against insatiable greed for conquest.

There existed a French soldier of high rank who placed his doubts prominently on record; but General Trochu and his writings were little thought of in July, 1870. Previous shortcomings

of "Intendance" were forgotten, and the theoretical disadvantages of *corps d'élite* were forgiven when fantastically attired Zouaves excited public admiration by gesticulation in front of Parisian wine shops.

To the eye there was much to admire in the French army. Its infantry had a world-wide fame. The school of musketry at Vincennes was a model; and the drill of the *chasseur* and *tirailleur* regiments seemed peculiarly adapted to modern requirement. In camps of instruction the art of manœuvre, as laid down in an official four volume book, was fully mastered, and the most critical could have taken little or no exception to the businesslike training of the combatant element. As in England, however, the equally important non-combatant service was not subjected to a practical test during peace time. And the sequel will exhibit this culpable omission as a primary cause of national calamity.

During peace manœuvres the French showed an inclination to modify their normal battle formation in columns, and develop musketry fire by deployment. It does not appear, however, that this sound theoretical teaching was acted on in the presence of the enemy. The French tactical formation was invariably a swarm of skirmishers, followed by massive columns in line, and a massed reserve; the field artillery remained throughout an action in the neighbourhood of the division or

brigade to which it belonged, and therefore was distributed along the general line; whilst the cavalry approached as nearly to the scene of strife as the nature of the country and the fire of the enemy would allow. Cavalry was also used to a great extent as an escort for Horse Artillery, albeit a feeling that cavalry, of the three arms, was the most vulnerable, and therefore the least serviceable, seemed to have gained ground since 1859, and the horse soldier played the part of an indispensable incumbrance.

If the campaign of 1859 had been of longer duration, the inexpediency of eliminating from a regiment of the line its talent and its muscle, in order to form *corps d'élite*, must have met with practical demonstration. The Zouave regiments were ever in the van, not optionally, but as the price paid for favour enjoyed; the linesmen had enjoyed no such favour. Conspicuous individual merit was rewarded by translation to the higher class. Still, after the battle of Solferino, it is said that the Zouaves gave vent to the following ominous expression: "Nous sommes toujours le bœuf." It so happened that days of piping peace arrived, and murmurs gave place to pardonable braggadocio. The system which almost led to disaster was established in full force, for it had one great charm counterbalancing defects—a charm appreciated by men of the Lebœuf school—it opened wide the door of patronage.

From these remarks it must not be inferred that the French line regiments are wanting in a noble, warlike spirit, or that they are bad soldiers. The Frenchman is by nature courageous, but his body is the dwelling-place of a most sensitive, volatile mind ; if you depress the mind, the body, especially a weak body, does not become a serviceable, warlike instrument. The historical fool of the family accepts his position, and is a happy, contented, unprofitable member of society ; but he may be no fool, although educated to play the part of one. Similarly, a regiment may be rendered inefficient by depressing influences, and to complete the work of degradation, *remove the best officers*. The word best, perhaps, ought not to be used ; one might rather say, best bred, or best educated. There must be a firm barrier of social rank between the commander and the commanded to keep up discipline, without which an army is nothing worth. As we know, a great proportion of French officers rise from the ranks. What an officer was, need never be asked ; what he is, forms an all-important question. Is he a gentleman ? is he educated ? Now, if the most gentlemanly and the best educated officers are removed, what tone is likely to prevail in the bereaved regiment ? Off duty as well as on duty the barrier between an officer and his men must be impassable, and every grade of rank should be distinctly marked, even in social intercourse.

In the year 1870 we remember the French Minister of War and the Commander-in-Chief (under the Emperor) a fine, good-looking soldier of thirty-three years' service, educated at the Artillery school of Metz. Marshal Lebœuf was a polished courtier rather than a soldier ; and those who read the pamphlet of lamentations, ascribed to the Emperor on the disaster of Sedan, will blame the master for putting implicit trust in an untried servant, rather than the incompetent but actual recipient of courtly favour.

It is fair to suppose that Napoleon was rather deceived than a party to deception ; but, nevertheless, culpable neglect is a crime. Why was the tried and trusty Mac Mahon in Algeria ? The French seem to have combined the functions of Minister of War, Commander-in-Chief, and Chief of the Staff, in one individual. Now, if an honest soldier like Mac Mahon had held a position similar to Von Moltke in the German army, the nation had not fallen. General Von Moltke is the head of the staff, or the reasoning intellect of the German army. A commander-in-chief uses his staff as a supplementary addition to his powers of vision and thought. The staff should be the cream of the intellect of an army presided over by its best soldier.

Colonel Stoffel, French military attaché at Berlin, failed not to call the attention of his Imperial Master to the superiority of staff Prussian system.

The staff is selected from the whole German army. The selected even are weeded out, and General Von Moltke is the schoolmaster of the remnant. In Germany, the officer known in England by the term Field Officer is a Staff Officer. Colonel Stoffel reports that mediocrity is banished from the Molke school, and uses the forcible expression, "Let us (the French) beware of the Prussian staff." No one will question this assertion, *that if a staff does its duty conscientiously*, and actually represents the eye of a General, very little can go wrong in an army, provided that the General be the right man in the right place. The staff will soon neglect the duty of lens and retina, however, if the General Officer shows an inclination to avoid interference, or if action taken is confined to a routine abnegation of responsibility. Here the writer may be pardoned for recording an example of what may be considered a line of conduct breaking through the confines of routine, but adhering strictly to the necessary bonds of discipline.

An officer commanding a cavalry regiment reports, through the staff, that he possesses eighteen old horses which are quite unfit for any cavalry duty; that they are not even available for recruit drill. The General Officer forwards this report, with his own recommendation that the animals be at once sold for the good of the public, the more so as every day they consume money's worth, their market value decreases.

The answer to this letter gives excellent reasons for allowing horses to continue the process known as eating their heads off in common parlance. Now, the voice of routine calls upon the General to pigeon-hole the correspondence. The voice of duty dictates a vigorous protest. There is no doubt that in cases similar the public service will always gain, and that the administration will feel, if it does not express, its gratitude for a soldier-like habit of transacting business on the principle of calling a spade a spade.

This brings with it a reflection. How can eighteen old horses unfit for service exist in a regiment? The staff seems at fault in this instance. Are there many regiments in the same condition? It is fair to assume that the Prussians manage their affairs with a sounder view to economy. The author can stray no further from his subject. Suffice it to say that the Prussians place far more trust in their General and Staff Officers than we do. If the destruction of eighteen worn-out horses in a large army caused one-tenth the correspondence abroad that it does in England, the world would be a great gainer. Standing armies on the scale of France, Russia, or Prussia, must be impossible for want of money, if not of paper. Therefore, by all means, do not give a General Officer of thirty-five years' service power to sell a horse without making application on the proper form through the various departments

which lead finally, *via* the Horse Guards, to the War Office. It is a question worthy of consideration, however, whether this much of power may not be delegated by the War Office to the Commander-in-Chief.

But let us resume our review of the Prussian forces after their short repose. If the years 1867, '68, and '69, were years of rest to the army, the staff reposed little enough, for the Prussian had become the German army. The Saxons, who had fought well, and the Bavarians, who had fought badly, for independence, all marched under the charge of Prussian Staff, commanded by the Prussian King. The Bavarians, who, though not the least brave, were the least soldiers of the confederation, naïvely remarked that, in 1866, with as skilful leading, they would have escaped the yoke of Prussia.

Prussian departmental organization was simply miraculous. The men, whether of the standing army or landwehr, seemed bred expressly for fighting. Their equipment was of the rough-and-ready nature, understood by the word serviceable. With trousers tucked into Wellington boots; with a pack, looking both clumsy and heavy, onward they marched. Discipline was no slender thread in this army; but the respect with which distinction of rank was recognised proved that the superior held his position by right rather than might.

We must be allowed a word on dress, for

the German helmet and boot played a more important part in the late war than is generally understood. The cloth garments were inferior to those of their adversary—but the German helmet is a splendid institution. With well-burnished spikes to the head-dress, black boots, and clean arms, the Prussian battalion presented a smart soldier-like appearance even at the conclusion of a campaign rendered unusually trying by a total absence of tent equipment. Then, again, the helmet was a real protection to the head, and comfortable withal. Landwehr regiments often could compete with line regiments in “physique,” but not in appearance, because they wore a “chaco.” This latter head gear is very inferior to a helmet, though made of leather. The day will, doubtless, arrive when tinsel gewgaws and ornamental deceptions migrate from the army to their legitimate abiding place, the stage; not that there is much make-believe in the German army. One’s thoughts will wander homewards. Had the British infantry been served out with Wellington boots in place of spatterdashes, loud would have been the howl of malcontents; yet the gaiter is merely a half measure towards the German boot. It protects the ankle and the trowser, and helps to keep the feet dry, but it performs all these functions in a most imperfect way. Mud which, when dry, represents small stones or grit, finds its way into the interior of the stocking in

spite of gaiters ; and it is fair to assume that the arable land of France would have been sown with gaiters had so feeble a makeshift formed part of the German equipment, for faithless and treacherous are buttons, male and female. The German boot, like every thing of leather in that country, is of inferior manufacture ; but the soldier in bivouac would have parted with his best friend rather than his boots. The Prussian need not boast of the remainder of his personal equipment. Two expense pouches of ammunition hang most awkwardly on his waistbelt, which also supports a short sword, of no possible use if it will not cut down a tree ; then the bayonet has to remain a fixture at the end of his rifle. There can be no great comfort, either, in having a cloak looped round the body after the manner of a cross belt. The cloak formed the soldiers only bit of "abri," and was therefore carried without a murmur for a thirty-mile march. What men those were ! A battalion actually marched over thirty-five miles, thirteen miles without a halt, and five men only "fell out." Could British soldiers perform this feat in marching order ? We presume they could, on service, when not surfeited with farinaceous food and alcohol.

The drill of the Prussian infantry is a most extraordinary mixture of pedantry and sound sense. The slow march is a burlesque on the strut of the crested champion of the "barn-door" harem ;

still the left arm is allowed to swing. This swinging of the hand which does not grasp the rifle, strikes the military eye at once, and the impression created is favourable. The men are not taught to "dress" by the touch of an elbow; they stand on twenty-four inches of front, and common sense points out this freedom of movement as a manifest advantage. Marching a line of men in contact, over rough ground, must be an absurdity. Do individuals keep their unoccupied arm close to their sides, and in contact with that of their neighbour, when enjoying pedestrian exercise? yet their "dressing" is perfect enough to all intents and purposes when in step. In 1870, whenever the German troops had some spare hours, one observed them at drill, and almost always by companies under their captain, or in squads. The company formed up in three ranks; but when for action, they immediately received the order to form two ranks. The author is unable to discover that any radical change took place in battalion drill between the years 1866 and 1870. Battalion commanders followed their own instinct in order to retain control over the four companies of their command. Nothing was laid down on the subject; no new book was published; but in practice they seem to have carried out the principle of making the fractions more dependent one on the other, giving them cohesion to a limited extent. For instance, Nos. 2 and 3

companies might be ordered to form the skirmishers, Nos. 1 and 4 the “repli” or support. Sometimes a whole battalion skirmished, and a second formed the supports. Again, if a small front had to be covered, No. 1 company might skirmish, No. 2 support, with Nos. 3 and 4 in reserve. Thus, a captain had not the independence of the officer commanding a company column in 1866; still evidence on this question is very contradictory, for the Germans are as proud of their company column system as ever—which means, that companies under their leader are allowed great latitude.

The battles of 1870 were different in nature to those of 1866. The French invariably covered their front with a swarm of skirmishers, who, in face of their training, fired their ammunition away in the most reckless manner, commencing at a range of 1200 paces, or more; then the chassepot recoils severely, so the men adopted a habit of firing from the hip, with the weapon in a horizontal position, their object being to envelope themselves in smoke and shake the “morale” of the enemy. The Prussians never wasted a shot, and the officers always succeeded in checking fire when they deemed it advisable. This fact speaks volumes in favour of the men and their discipline. Then the Germans placed a limit to the number of their skirmishers. They formed a line of double marksmen at about

three paces apart. When this line advanced, as it invariably had to do against the French, the men who found cover in their front rushed forward and took advantage of it, the marksman and his comrade firing in turn, one crouched down behind the obstacle to load, whilst the other took aim over it. If, as often happened, a flat piece of ground was in front of one part of the line and cover abounded in another, the exposed skirmishers were not permitted to incline right or left. They had to run up to the alignment of those under cover and lay down firing when opportunity offered from this position. The German system is to reinforce, but not recall skirmishers. Private soldiers informed the author that it was very amusing to be a skirmisher, who seldom was hit at long ranges, but "the very devil" to be in column where one projectile might disable a dozen men. Two of these men were in the column of Guards which attacked St. Privat. The losses sustained by the Prussians on that occasion quite bore out their statements.

When the two opponents arrived within point blank range the improvident Frenchman had expended his ammunition and the *corps d'élite*, or front line, retired with some precipitation, giving place to the line regiment previously remarked on. The result is historical. Von Moltke once told his staff that the problem how to supply ammunition to the first line during an engagement

was one he could not solve. In England, we think it is to be managed by relieving skirmishers. Doubtless, this method is better than giving ground in order to refill pouches in sheltered spots, but the question is, how to feed the first line, not the skirmishers of the line only. The Germans decide on never wasting a round of ammunition ; so as to prevent, in place of cure, the evil.

The German army seemed to have two principles from which they never departed. Their front attack was always supported by powerful reserves, and they never omitted a flank demonstration or actual assault. They were equally cautious about protecting their own flanks. If one discovered a rifle-pit made by a sentry on outpost, one might be sure another flanked it ; if a garden wall was loopholed one might be sure that a flanking fire from behind a natural or artificial obstacle would take the assailant in flank. If an advanced guard, or even a main body entered a town or crossed a bridge, flankers were sent out, even when the presence of an enemy was impossible. There is nothing like learning good habits, and a landwehr force, even with a good staff, does not pretend to be an experienced army.

After 1866 great attention was paid to the engineer department, the artillery, and cavalry, these arms having been found wanting. Every soldier of the standing Prussian army (not the Bavarian) seemed to have a knowledge of field engineering. Give a bungler a pickaxe and bid

him loop-hole a wall, and you will find on your return a series of windows as the upper row; and if you have also ordered him to make the more important lower tier of holes, your wall will contain gaps—if it has not ceased to merit the name wall. Again, in cutting down wood to form an obstacle, a novice will pull the fallen wood about and fail to impede an enemy; a man of experience will fell the timber in such a way that an additional wire or two renders it impassable. How did the Germans learn all this in peace time? We can hardly ask the country to provide woods and walls for the practice of British soldiers in general, but a few out of every line regiment might receive instruction. The use of the spade is appreciated in this country, but we doubt whether many individuals exist out of the Ordnance Corps capable of transforming a ploughed field into a roadway in wet weather. How many soldiers in the British army ever saw fascines used to repair a road? How many have ever seen a river bridged or a bridge destroyed? The writer thinks that the Royal Engineers on service might receive valuable aid from men instructed in field engineering, and that the Engineers ought to impart a little instruction in their art during peace. The pocket red book, and every other aid, is of little value without practical instruction.

The tactical position of field artillery in modern war does not seem to have been understood by the French, who laboured in the late campaign

under the disadvantage of possessing a gun which was too heavy, and yet carried too light a projectile. The Prussians brought light galloper guns (4-pounders) into the field, as well as 6-lb. guns capable of throwing a 15-lb. shell. In all the early battles the Germans outnumbered the French in guns in a larger ratio than in men. Up to 1866, the artillery of the Prussian Guard alone fired shrapnel with a time fuse. In 1870, shrapnel was fired from guns of position even, and the time fuse could be set to explode at 2000 odd paces. No solid round shot were used, and we may here remark that this fact facilitates the growing habit of diminishing the distance between infantry lines of attack. The German percussion shell was conical; and even when it did not burst on striking the soft ground, there naturally was no "ricochet." This seems a disadvantage. The Napoleonic idea of massing artillery is a thing of the past. Battles in the open country, such as the latter ones of the campaign, when the relief of Paris was attempted, commenced with an artillery duel. The defending army is more or less hidden from view: the attacking force has to face the fire of a hidden skirmishing line, at a manifest disadvantage. The gun possesses a longer range than the rifle, therefore artillery passes to the front, and, at 1200 yards range, searches and shakes the infantry position. For this purpose the guns of the various divisions, as it were, skir-

mish by batteries properly escorted. Horse artillery, with a cavalry escort, probably makes an effort to turn or enfilade the unascertained position ; and whatever movement the assailant makes, the defender counters. After a time the infantry forges ahead, and the disposition of the artillery must needs change : it establishes itself on heights, in order to fire over the infantry, or it takes ground to a flank, so as to sweep obliquely across the front. The great want is an escort, both mobile and effective, to give guns freedom of action away from the main army. A certain number of guns may be employed in disturbing the comfort of the reserves, but artillery on the flanks can alone give material assistance to the attacking line. The Prussians have one Jager battalion to every corps. A company of these men, lightly equipped and trained to rapid movement, makes an admirable artillery escort. Dismounted dragoons were not ~~thus~~ made use of ; but although a complete system of cavalry reconnoissance was the great hit of the campaign, German cavalry is sadly behind the age in many respects. The material is excellent, but by no means made the most of—for instance, the dragoon was armed with a breech-loading carbine ; on out-post duty, the lancer, with a pistol, was equally, if not more formidable. What did this fact prove ? Certainly not that a lancer is a serviceable vidette ! but that the dragoon neutralized the advantages of a breech-

loading rifled firearm, by a total ignorance of the way to employ it. In the first place, the weapon is a very poor one, and in the second, it was fired from off the horse's back. It does not require very acute perceptive power to discover that a dragoon's horse in the present day ought to be frequently used as a locomotive, designed to transport marksmen with the utmost rapidity from place to place. The proper defence for artillery will be the dismounted light dragoon. A dragoon should never fire without dismounting, except to give a signal. This fact calls for no demonstration. If it were not the writer's intention to devote a chapter exclusively to modern cavalry, the German giant, in shot-proof armour, on his sixteen hands of undefended horse flesh, should find his cuirass a poor protection against the pen, even though it may have turned half a dozen spent bullets during a six months' war.

If the modern horseman requires, "*æs triplex circum pectus*," in addition to the covering already afforded by his horse's head, from projectiles fired at a lower level, let no time be lost in the composition of a cavalry dirge.

That German cavalry will be handled in a different manner in the next campaign, the writer feels confident; but in 1870 their only marked success was out post duty and Cossack manœuvre. It was achieved under the most exceptional circumstances, never likely to recur. Greek did not

meet Greek. The result is therefore unreliable, and must not be quoted as a precedent for war. The writer is aware that this is not the generally received opinion. In high places an opinion has been expressed favourable to heavy cavalry; and, unquestionably, a finer body of men and horses than the cuirassier regiments of Prince Frederick Charles's army never were placed in the field. In the first place, the horses were well up to the weight of the enormous men on their backs; their condition was admirable all through the winter campaign—thanks to the quadruped having enjoyed luxury designed for bipeds. If a German horse soldier could find no stable he made use of a “salon” on the ground floor; but, except under unavoidable circumstances, the horse was neither exposed to damp nor cold. This care, added to a liberal supply of grain, will always keep up condition. Then, again, except when in contact with men whose proper position was on board ship, what resistance did the German cavalry meet with after Sedan? There is no reason to suppose that the cuirass was anything but an encumbrance. It was a case of handicapping a horse for a walk over. The writer by no means joins in the popular outcry for light men on swift horses. A dragoon should be a strong, muscular, long-limbed man; and his horse must be able to carry him. Hussars may be lighter men; but the light man must trust to his firearm more than to his sword;

and his sword should be made exclusively for pointing. The writer remembers an instance of a "light-weight" on a thorough-bred making a laudable effort to diminish the number of mutineer Sepoys by one; he delivered "cut one" on the head of a receding black-skin, and was rewarded by a sardonic smile. The result would have been different (may be, in this instance, less satisfactory), had the point of a straight sword been directed towards the fifth nigger-rib (for the writer always had a shrewd suspicion that the thick head belonged to an officer's servant or a mess cook). The German cuirassier has a magnificent straight sword, and his great muscular strength and long reach would make him a very formidable antagonist, if he only left his armour at home. The writer was informed that the captured chassepot carbine was served out on the field to cuirassiers, but he is unable to vouch for the fact. At the battle of Vionville, the 7th cuirassier regiment charged and took a French battery by surprise. With admirable dash and presence of mind, the regiment passed on over an escorting battalion of infantry, and was afterwards checked by the fire of a mitrailleuse battery. Out of 490 sabres, 147 only live to boast of the exploit. The captured battery and the spread-eagled battalion took ample revenge on the retreating horsemen.

The shot-proof cuirass was found wanting, and even the long straight sword had but a momen-

tary triumph. What a very harmless thing a charge is, even of heavy cavalry! Did the heavies kill thirty men at Balaclava? Certainly not more. Is it sure they killed ten? Peradventure, not more than five died. Cavalry will only form part of the tactical line of battle in small numbers; and, as a rule, a single regiment should attack by wings, or in open column of squadrons. A single line of cavalry, advancing without one or more supports, may be called a false movement. The future tactics of cavalry in the general line of an action will partake of the nature of hide and seek. Theoretically, cavalry will be well placed in echelon on the exposed flank of an army (on the defensive), near enough to be brought to the front by signal when the enemy's fire waxes weak.

Did the cavalry in any early action of the campaign engage infantry without sustaining a loss out of all comparison to advantage gained? The French 8th and 9th cuirassier regiments made a supreme effort in the retreat from Wöerth; but where are they now? Prussian cavalry headed back Bazaine's first effort to escape from Metz, without severe loss, but how many Chasseurs d'Afrique survived Sedan? No! Cavalry must not be used as in those fabulous good old days. Their presence is no less needful on the battlefield, but the revolving bolt is a most prosaic but effectual suppressor of dashing heedless chivalry. Cavalry must be handled with intelligence. To

make a vidette or skirmisher of a lancer in a close country would not be a proof of intellect, if riflemen existed.

But, as regards the more important tactics of infantry, 1870 afforded an instance of columns facing columns. The Germans, with all their experience, adhere to column attacks. The French, who, after all, were once good soldiers, and will be so no doubt again, also adhered to their columns. Are we, inexperienced English, justified in blindly preaching the doctrine of deployed lines? The British was once the only soldier with a "morale" and self-confidence sufficient for line formations. But is the British soldier in the present day mentally and physically superior to the German?

Would it not be wise to admit the possibility of our lines wanting in stability when facing Prussian infantry, if only for the sake of argument? The Germans had much experience, yet they attacked St. Privat with columns, and these were the *élite* of the Prussian army—the Guard. Their loss, as one might suppose, was enormous; still, to-morrow, they would adopt the same formation. The author trusts assistance will be given him in further discussion on so important a question.

If the distance between lines be decreased, will the compromise suffice? A battle, when the sharp-shooting business is over, must prove quick and decisive. There is no such a thing as throw-

ing back a line $\frac{1}{18}$ of a circle on the centre company of a flank regiment in modern battles. When a weak point shows itself support must be at hand. The breaking up of a first line is the work of a moment, when quick firing and the bayonet charge begins.

The writer deprecates any dogma being laid down on a theorem of such vital importance.

The official account of the campaign of 1870 ought to be translated and served out as food for the official mind ; and if the peace manœuvres of a British division in 1872 bear any resemblance to those in vogue for the last fifteen years, the military talent of Great Britain may be pronounced precarious. But why should this be the case ? The Drill-book is second to none ; the army is daily becoming more professional ; and who will dare assert that British Generals are incapable of affording their subordinates practical demonstration of historical and theoretical truths ?

On no single occasion did the French army of 1870 prove a worthy heir to the glorious name of a warrior race. Outwitted, outnumbered, outmarched, undisciplined, uneducated, unsupplied, by hundreds of thousands it glided into bondage, leaving a defenceless nation to rue the day when confidence first reposed in the peccant judgment of one human genius. Thus will it ever be when power is centralised and becomes the monopoly of one individual and his satellites. The individual may

mean well, but it is not in mortal man to close the ear to flattery or resist the soothing comfort of a routine narcotic. Begone, spirit of unrest! Why torture me with novelty? I the king am content—what would'st thou more? The despot sleeps, the courtiers laugh, Diogenes returns to his tub, and the nation is ruined!

CHAPTER V.

LIGHT INFANTRY.

AMONGST the many lessons which we may learn from the wars of 1866 and of 1870-71, and which we shall do well to study carefully, is the manner in which the Prussians used "Light Infantry," or "Skirmishers," or "Troops in extended order," by all which expressions we mean the same thing. All nations had made use of skirmishers more or less—the French most of all; but even they made skirmishers act a secondary part in battle, and used them only to keep those of the enemy at a distance, to screen and cover the movements of their troops in close order, depending upon the latter to make the decisive attack. The improvement in firearms—resulting first in the general adoption of rifled cannon and muskets; secondly, in that of breech-loaders—had less effect upon the infantry tactics of the French than upon those of any other European army. They altered their formations from three deep to two deep, but do not appear to have changed their views as to the manner of using light infantry, which continued much the same as in the wars of the Republic and

First Empire. Other nations, our own included, which had all hitherto employed skirmishers much less than the French, began to perceive the necessity for a change of system; and whereas formerly the practice of skirmishing was almost confined to special corps and to picked companies of other regiments, it was thought advisable to train all infantry to act in extended order. Still skirmishing remained a secondary thing with most armies. The Prussians alone seem to have estimated at its full value the effect produced upon tactics by the new arm. They had to consider two things: how to reduce to the minimum the murderous effects of the enemy's fire upon themselves, and how to make the most of their own fire. They came to the conclusion that the only way to attain their objects was to make skirmishers principals instead of subordinates in action, and to make them close with the enemy and give the knock-down blow which hitherto it had been the province of the masses in line and column to administer. This is the general principle upon which their infantry has acted on almost all occasions when they were the assailants in the last two great wars; and this principle is recognised in their field exercise book, though not to the extent to which it has been carried into practice by them in actual warfare. This style of fighting makes great demands upon the skill and decision of regimental and specially company officers, also

upon the intelligence of the men; and, thanks to the enlightened views of the Prussian war department and to the high standard of military training which had been attained during the long years of peace, these qualities are very general in their army.

Without highly-trained and thoroughly disciplined troops it would be dangerous to imitate the dashing tactics of the Prussians (or, as we may now say, of the Germans); but without doing so (at least as far as the general principle is concerned), we believe that any army which encounters them will fight at a great disadvantage.

The object of the present paper is to discuss the position of the British army in this respect, examining the theory of light infantry drill laid down in our field exercise book, together with the manner in which it is applied by our general and regimental commanding officers, and suggesting such changes as appear to us necessary,

First let us analyze the "General Rules" for Skirmishing, commencing at page 205, "Pocket Edition Field Exercise," 1870. And as we are going to pick some holes in the chapters relating to Light Infantry, it will be only fair, before commencing this ungracious process, to express our admiration generally of the book as far as concerns the other chapters. After a comparison of the French, Austrian, and Prussian field exercises with it, we are of opinion that the British system

of infantry drill, *as far as concerns movements in close order*, is superior to any of those mentioned, and that none of these nations have so convenient and handy a compendium as we possess in our little red book.

On a perusal of the "General Rules" it will be found that they only apply to what may be called the secondary employment of skirmishers; i. e., the employment of them alone hitherto recognized by any army, except that of Prussia, in civilized warfare. It is throughout contemplated that the movements of the skirmishers should be dependent on those of the lines and columns, whereas we believe that the reverse should be the rule, except in the case of advanced and rear guards, and of flanking parties, whose special object is simply to screen, protect, and clear the way for the march of the main body. See, for instance, General Rule III., page 205. "Relative Duties of Skirmishers, Supports, and Reserves:—I. The movements of the skirmishers must depend *in a great measure on the position and movements of the enemy.*" We should substitute for the words in italics, "entirely on the plan of attack or defence, and on the position and movements of the enemy." Again, "care should be taken that the skirmishers protect and overlap the flanks of the main body they are intended to cover." We should add, when acting *defensively*, but when acting *offensively* the skirmishers will only have to think of support-

ing one another, of attacking the enemy to the best advantage, and of repelling his attacks should he assume the offensive. The main body must take care of itself, and be placed so as best to improve any advantage gained by the skirmishers, or to support them in case of repulse."

When treating of skirmishers generally in this manner, we include their immediate support and reserves—in fact, the whole of the first line of battle; and we hold that, when acting offensively, "troops in extended order *should always* (not *may*, as stated in General Rule 1) be divided into three parts—skirmishers, supports, and reserve." The way in which skirmishers are employed at our camps of instruction, when acting offensively, is generally ludicrous.

A brigade is ordered to advance to the attack of a position "covered by skirmishers." Sometimes each battalion furnishes a company for the purpose—sometimes the whole of one of the *flank* battalions is extended.

The latter operation becomes an awful gymnastic effort for a great part of the men, and would certainly not be ordered by any officer in his senses on actual service, where you like to economize strength.

A field officer is told off to command the line of skirmishers, which, by the way, is an absurdity; for how can any one officer control the movements of a long extended line amongst woods, hedge-

rows, or hills ; or how can a mounted officer in an open plain (where he *could* see what is going on) venture up to a line of skirmishers in action ? No ; field officers will, as a general rule, be useless in the front line. Their place is with the reserves. The captains of the skirmishers must judge for themselves, the intention and direction of the movement having been pointed out to them before they advanced. To continue our field day : the skirmishers advance, a directing company being named, and a point of direction given ; but they are not allowed to make their point.

The General's bugler is perpetually sounding "right incline" or "left incline;" A. D. C.'s on foaming horses are constantly riding up to the unfortunate field officer. "The General says, Sir, that the right (or left) of the brigade is uncovered;" "the skirmishers have run away from the line;" or "the line is on the top of the skirmishers."

The field officer, if he has any warlike instinct, was probably (as he ought to be) thinking only of the enemy's position, and how best to get at him ; but he is expected to attend to what is behind him, not to what is in front. He must "*regulate his movements on those of the main body.*" At last, after a good deal of bother, and strong language, and braying of bugles, the skirmishers, who have rarely any supports, are halted, and made to lie down by bugle sound, or recalled by the "as-

sembly," in either case the main body, making a gallant charge, or perhaps with wonderful steadiness firing volleys from a perfectly exposed position, regardless of the murderous fire which is being poured into them by the enemy about a couple of hundred yards off. We are confident that most of our readers, of whom we hope to have many, will have witnessed scenes of this sort, and will admit that our description of what the ladies call "a very pretty field day" is not exaggerated.

Page 95, sec. 22, and page 206, sec. 4 : the distance recommended between skirmishers and supports on a plain, appears excessive ; it should be about 150 yards. Less than that would expose the supports too much to fire. A greater distance would prevent them from giving effectual assistance to the skirmishers. If the support be much annoyed by fire, it will be well to extend it partially (to about two paces' interval). Of course the practice which we observed to be common in our army, of making a support "step short" or "mark time," because it is too near the skirmishers, must never be allowed. A support under fire must either be moving briskly or lying down. When there are undulations of ground sufficient to give some sort of cover, as will generally be the case even in the flattest countries, captains must make their supports bolt from one such sheltered place to another. The nature of the ground and

other circumstances should dermine whether a support should be in rear of the centre, or of one of the flanks of its skirmishers. For instance, if one flank of the skirmishers were moving over ground affording good cover, whilst the rest are in the open, it will generally be better to keep the support in rear of the sheltered flank ; or if one flank of the skirmishers be *en l'air*, whilst the other has a good point of *appui*, it will be better to keep the support near the exposed flank. If there is no apparent advantage in being elsewhere, the support will do well to keep in rear of the centre. In a hilly or wooded country the safest and best place for supports will frequently be close up to the skirmishers—sometimes even on their flank, and in a line with them. Sometimes it may be expedient for a captain to divide his support, keeping one sub-division himself, and sending a subaltern with the other.

Page 208, vii. : It does not at all follow that the centre of a line of skirmishers should be the most convenient point of direction. It will be well at regimental drills to alter the directing company and directing file, also the direction of movement frequently, for the sake of practice. Our instructors make too much fuss about “ alignment.” Granting that skirmishers should form a general line on a plain, when in a broken and undulating country this line must adapt itself to the nature of the ground, and will often form a

series of salient and re-entering angles. The generally unintelligent and barrack-square nature of our skirmishing drill instils wrong principles into the heads of our officers and men. We have actually seen experienced officers dress lines of skirmishers, and seen their advance guided by sergeants with their rifles at the " Recover."— A sickening sight!!!

Page 208, ix. Officers should place themselves wherever they can be of the greatest use, and this will depend on circumstances. When skirmishers are firing at the halt, the captain will probably find the windward *flank* the best place.

Page 53. Skirmishers, supports and reserves, when halted, should always kneel, sit, or lie down, if possible under cover, no matter whether they be under fire or not, for, as a general rule, you don't want the enemy to see them.

When skirmishing, no attempt should be made to make the men keep step, and the arms should be carried at pleasure.

This is compatible with perfect steadiness, as we see by the example of the often quoted Prussians, and this degree of *looseness* will be a corrective to the *stiffness* often with us confounded with *steadiness*, which stiffness, acting upon the mind as well as upon the body, is very prejudicial to the proper training of light troops.

Page 56, s. 53. Change front by file formation, never by wheeling. There can hardly be a more

ridiculous military sight (except the German edition of the "Goose step"), than a long line of skirmishers wheeling as per regulation. We remember seeing a company of a regiment fresh from England, performing this operation most conscientiously in Kaffirland, files near the pivot marking time, and the rest coming round gradually, waiting for the outer flank. But some puffs of smoke from the bush and the ping ping of some bullets converted the majestic wheel into a very undignified, but effectual file formation. If the change of front is from the halt, make the pivot files kneel down at once under cover, which each man will do as he comes up, and those first formed will fire away to cover the movements of their comrades. If on the march, the movement may be continued in the new direction, the first man moving on at once, the others as they come up.

Page 91, and following. The captain and section commanders are to take care "that the men, &c., fire only when directed so to do." This rule may be acted upon in the first instruction of recruits, but not afterwards. It is objectionable on principle to control skirmishers to such an extent, even if you can succeed in doing so; and this will only be possible on open level ground, where the men are under the eyes of their officers. By all means check the expenditure of the ammunition. This is a most important thing; but

we shall arrive at this better by teaching men never to throw away a shot, only to fire when they are sure of their mark, *not to shoot at single skirmishers at even 300 yards' range*, rarely to fire when in movement, always to fire from a rest if possible. These things must be perpetually dinned into them, and *into their instructors*. We have got much too fond of popping away at long range at our camp field days—a most pernicious practice, which cost the French very dear in the late war, and which the Germans studiously avoid. British infantry used to be famous for reserving its fire for close quarters. Let us not lose that excellent habit; the principle is a sound one, now as ever.

Page 94. The best way of advancing and retreating in skirmishing order will generally be by alternate sections, the fire of those halted covering those on the move.

We remark that officers and men frequently take a very erroneous view of what constitutes cover (in a skirmishing sense). We often see a number of men, not recruits too, run behind a high stone wall or some other obstacle which would certainly shelter them from the enemy's fire, but would also prevent them from seeing or shooting at him. Again, we have seen officers of many years' service place their men on the exterior slope of a hill amongst gorse bushes, which certainly gave partial concealment, but very poor protection, when the brow of the hill a few paces

back would have fulfilled both requirements much better. The following principle should be insisted upon—that cover, however important, is, after all, but a secondary consideration. The first thing is to put yourself in the best position for killing the enemy. If, whilst doing so, you can avoid his fire, all the better for you.

Page 98, sec. 25. If a Captain wants his company to form more than one rallying square, he should show his intention more clearly than by using the authorized word of command “Form rallying squares.” The plural might well be mistaken for the singular, whereas if the word were, according to circumstances, “Company, rally,” “Half Companies rally,” or “Sections rally,” there could be no mistake about it. This will do for drill, but really, on service, section leaders must judge for themselves whether to run to the Captain or to rally the nearest men round themselves; and the men must often make up their own minds whether they will run into square or hold their own independently or in small groups, which they may frequently do with advantage.

With our present arms, skirmishers need not mind cavalry nearly so much as formerly. In rough ground they may generally remain extended in defiance of the horsemen. We make too much of cavalry, as a rule, and though our Drill-book teaches us that determined infantry are more than a match for horsemen, we always

at our field days act as if we were in an awful funk at the approach of cavalry. The "alarm" sounds, and away we go helter-skelter into square, generally without paying much regard to the nature of the ground. The principal thing thought of is how to get the squares into *échelon*, which, after all, is of little consequence. This habit of hurry-scurry at the approach of cavalry may have a bad moral effect on infantry. Moreover, undue haste in getting into square may give the enemy opportunities to pound us with artillery.

Bugle calls are rarely used on service, and should be seldom used at drill. Our people are too fond of them. Officers and men should know them, because they are occasionally useful. When used at drill, the men should not be allowed to act upon them, but should wait till the Captain has given the order for which the bugle sound is a signal. If the men at drill are allowed to act on the bugle sound, they are apt to lead the officers, instead of the officers leading them. We have frequently seen Company officers entirely ignorant of the meaning of a bugle sound; and, even if they knew the sound, incapable of translating it into a word of command, reduced to helplessly running after their men, who were generally better instructed than the officers, and were doing the right thing of their own accord.

It will be seen from the foregoing remarks that we have not a high opinion of the manner in which

the British soldier is trained to light infantry work. The fact is, that during the long peace (at least as far as the mass of the British army was concerned) from 1815 to 1854, ours had ceased to be a war army, when on home service. Marching past, and other parade movements, formed the chief part of our training. Happily for the army, the Crimean War roused it to better things, and the good spirit has been to a great extent kept alive ever since. Many improvements have been made; but our views upon this subject of light infantry have not expanded as they should have done. We have pointed out what we venture to consider mistakes in the recent edition of the Field Exercise, and we hope that our readers will agree with us as to the high position we have assigned to the art of skirmishing. If so, they will see the necessity for giving the highest possible training in this art to officers and men. The necessity once appreciated, we do not doubt that British battalions will soon be more than a match for those even of the victorious Prussians. We must reluctantly confess our belief that at present our infantry would meet theirs, battalion to battalion, at a disadvantage, owing to bad and insufficient training in the more important part of tactics.

In the present paper we have only touched upon the main principle which, in our opinion, should guide a General in the employment of skirmishers, and pointed out certain more or less grave defects

in our system of light infantry drill as expounded in the red book, and still more as interpreted by instructors. In fact, we have barely gone beyond the rudiments of the question. On a future occasion we propose to enter more fully into the higher branch of the subject, and to explain at greater length our views as to the employment of skirmishers in battle.

A. I. Appleton

MILITARY

ESSAYS AND REVIEWS.

By X. & Y.

TO BE CONTINUED.

PART III.

(JUNE, 1871.)

CONTENTS:

LIGHT INFANTRY (CONTINUED)—MODERN CAVALRY.

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CHAPTER VI.

LIGHT INFANTRY.

(Continued.)

THE ATTACK.

A BRIGADE is ordered to attack a position. It is composed of four battalions of infantry, each battalion consisting of six companies, each company of four officers, six serjeants and 125 *combatants*, rank and file, of whom however only one hundred rank and file are under arms. The combatant staff of each battalion comprises a Colonel, a Major, and an Adjutant. Attached to the Brigade are two Batteries of Artillery (twelve guns), two squadrons of cavalry (three hundred horses), and half a company of sappers (one officer and fifty men). The brigade is formed for attack.

Infantry—1st line.—One battalion with two companies extended, two in support and two in reserve, one hundred and fifty yards between skirmishers and supports ; two hundred yards between supports and reserve.

2nd line.—One battalion deployed three hundred yards behind the reserve of first line. A section of sappers attached to it.

3rd line.—Two battalions in columns of half battalion at deploying intervals, three hundred yards behind the second line. Artillery takes position on one or both flanks of the infantry (according to the nature of the ground) and opens fire; a section of sappers accompanies it. Cavalry, after having, if necessary, driven in the enemy's horsemen, furnishes half a squadron as escort to each battery, the other squadron being kept in reserve near enough to give effectual support, if required, but as far as possible sheltered from fire. Cavalry soldiers should be armed with rifles good up to six hundred yards, and should be trained to act on foot upon occasion as skirmishers, in which manner they would often be employed when escorting guns.

All these preliminary arrangements should be made, if possible, out of fire, and, if the ground admits of it, out of sight of the enemy.

The advanced guard, composed, according to the nature of the country, either entirely of cavalry and artillery, or entirely of infantry and artillery, or of the three arms combined, covers the brigade during its formation.

The infantry of the advanced guard afterwards forms part of the 1st line.

The Brigadier having reconnoitred the position

and the approaches to it, assembles all commanding officers, also the captains of the front battalion, and with the aid of a map (with which every officer is supplied) points out the chief features of the ground, the direction of the proposed attack, the probable position of the enemy's reserves and of his batteries (if their fire has not already been drawn), the general object of the movement, also the situation of friendly troops on either flank. The Brigadier having been warned that the occupation of the enemy's position is of urgent necessity, impresses the following maxims upon his officers :—

“ Keep on advancing as rapidly as you can consistently with a proper degree of solidity. Fire as little as possible. If you meet with serious resistance try to work upon the flanks. Keep your men well in hand. When you have dislodged the enemy establish yourselves firmly in his position. Don't pursue without orders.”

Artillery officers are directed to fire steadily upon the main position as long as they can do so with safety to the advancing infantry. As the latter close with the enemy the guns will be elevated, so as to play upon his reserves.

The Brigade is put in movement.

The Brigadier's usual position is with the 3rd line, which he keeps in hand as his grand reserve. He has formed it in half battalion columns because these offer a smaller mark to the enemy's artillery

than would battalion columns ; but if the nature of the ground is such as to afford shelter to the larger formation he will prefer it, as being more immediately under his control.

In like manner with regard to the battalion in 2nd line.—On fairly open ground it can remain deployed and move with regularity, either thus or in direct echelon ; but if the country be much broken or woody, the Commander will break it into “company columns.”

As this is a formation not yet recognised in our service, and differing somewhat in the form and application recommended by us from the well-known Prussian formation, a few words of explanation are necessary.

We mean by a “company column” a company formed in column of half companies.

If a battalion in line is ordered to form “company column,” each company reduces its front by doubling its left half company in rear of the right—a directing company is named. The others keep, as a general rule, their deploying intervals, but each captain is at liberty to manœuvre his little column to the best advantage, so as to avoid or pass through obstacles, and to get shelter.

The general alignment is maintained, and at any moment line can be reformed, or any other formation adopted at a signal from the Commanding Officer, who as a general rule remains with the directing company. A battalion will thus be

able to move under a heavy fire in broken ground with less loss and more regularity than in line.

The two skirmishing companies of the first line occupy a front of about seven hundred paces ; this, therefore, may be considered the front of the brigade. If the ground is open, the skirmishers advance in single rank, because they are thereby less exposed to fire ; but in broken ground, or amongst rocks and trees, being more exposed to sudden surprises, the men of a file generally keep together. The intervals between sections are kept, whenever convenient, as it will be on open ground, because this enables section commanders to control and superintend their men more effectively ; but in broken country these intervals generally disappear, owing to accidents of ground, of which it is necessary to take advantage. In skirmishing, indeed in all military movements, there should be no pedantic adherence to any rule. Skirmishers may be one deep, two deep, or more deep. Intervals between sections or " fire groups " (as the Germans call them), may be kept or not, files may be more or less distant from one another, according to the circumstances of the moment, which well-trained officers and men appreciate, and act accordingly. One of the companies is named to direct the movement. Its Captain names a directing man, shows him which way to go, and places a trustworthy non-commissioned

officer behind him to see that he goes the right way.

The first task is to drive in the enemy's skirmishers, who cover his front. If the ground is open, they make little opposition and retire on the main body, the assailants firing only just enough to discourage them from halting, and themselves pressing on rapidly. Some cavalry appear in the distance, but the skirmishers do not suspend their movement. They approach with the evident intention of charging the skirmishers, who form sections if the horsemen are numerous, if not, remaining as they were, in any case reserving their fire till the horsemen are within one hundred yards or so, and then aiming very low, and at the horses. Sometimes, in case of a great onslaught of cavalry, it is advisable to treat them with more respect. The skirmishers then form company ovals. If possible, the captain chooses a place where he is sheltered from infantry and artillery fire. Skirmishers must not be nervous about cavalry. If the enemy detects this weakness, he will make equestrian demonstrations, so as to induce them to form square, and then pound them with artillery. Besides, our skirmishers are not left unaided; our own artillery, which keeps on advancing on the flanks as forward as it can without suffering from the enemy's sharpshooters, sends a few shells amongst the hostile squadrons; our own cavalry

also draws near, and the infantry supports are close at hand. The enemy's cavalry is repulsed, and the movement continues.

If there is strong ground in front of the enemy's position, his skirmishers will hold it stoutly, and there will be some stiff fighting before they are driven out of it. Imagine a little ravine parallel to our front; the slopes covered with rocks and wood; the bottom open ground. Our Captains halt their men on this side. They see that they cannot afford to take them at once across the open space under the enemy's fire; the loss would be too great. So they keep them under cover, and make them keep up a slow steady fire at the opposite side. The nature of the ground has allowed the supports to come close up. The Captains confer together. A few words settle the matter. In case of difference of opinion, the senior orders. It is clear that one or both flanks must be turned by one or both supports whilst the skirmishers occupy those of the enemy in front. As a general rule it will be better to operate upon one flank only, as nothing but a great preponderance of force or great superiority in the quality of your troops will render an attack upon both flanks advisable. One of the supports then takes ground to a flank, concealing its movement from the enemy. The Colonel detaches a company from the reserve, which has meantime come up to follow it in support; the other support and the second reserve com-

pany remaining in rear of the skirmishers, under the immediate control of the Colonel. A demonstration is made on the flank which is *not* to be attacked, by an increase of fire and a simulated movement of troops. The Captain of the support on the other flank, having examined the ground and chosen his mode of action, partially extends his men under cover, fixes bayonets, and charges as much upon the flank and rear of the enemy as possible, showing the way himself. He does not allow his-men to fire; the same men cannot shoot and charge at the same time; and the fire of the skirmishers is covering his movement. When he charges, the enemy, naturally nervous for his flank, probably retires; the skirmishers immediately dash across the ravine, are rallied on the other side, and then press onwards in pursuit. This flank movement has probably given us some prisoners, who must be halted under escort to await the main body. We have also had some loss, but it is a fixed rule that no one under any pretence falls out to succour the wounded when advancing; the litter-carriers, of whom there should be four to each company, are with the reserve, and it is their business to seek for wounded, and to remove all whom they discover to the appointed place. But perhaps the enemy is inclined to make a more vigorous resistance than has been above supposed. His skirmishers too may have supports and reserve close at hand, and he may be prepared for

our flank movement. We must then treat him to a greater display of force. One of the companies acting on his flank in that case covers or prepares by its fire the charge of the other, and half the sections of the skirmishing companies dash across the ravine, while the other half keep up a rapid fire, afterwards crossing in their turn.

An occasion of this sort, or when an attacking enemy is within a very short distance, are the only times when rapid independent firing is allowable; and then it should be an affair of two or three minutes at the utmost.

The Colonel keeps the reserve close up, and ready to repel the enemy, should he attempt an offensive movement. But he is not likely to do so at present. His only object is to delay our advance on his main position; It is there he will make his great struggle. So, when his skirmishers find their flank turned, they retire, making a stand wherever the ground is favourable. We dislodge them, as before, with the help of the supports and reserve, sometimes without the necessity of a charge. If one of the Captains of our supports sees an opportunity of placing his company so as to enfilade the enemy's line, its fire will alone suffice to dislodge him. Thus we force our opponents back to the position occupied by his main body. His troops are well concealed; but, knowing the nature of the ground, we can well judge how it is occupied; and though his infantry masses have as yet made no sign, his guns have

been playing on our own, and, when occasion offered, on our second and third lines. These, however, being handled carefully, and with due regard to the ground, have suffered very slightly. Our batteries, established on each flank of the second line, are firing heavily over the heads of our skirmishers. The second and third lines, profiting by undulations of ground, draw closer to the front. There is a momentary pause. Our skirmishers halt under cover, firing little, for little can be seen to fire at. Before them is an open slope, extending several hundred yards to the crest of an eminence, behind which the enemy's lines doubtless await us. The range is generally parallel to our line of advance, but much indented, presenting an outline very favourable for defence. But, before the Brigade was put in movement, the Brigadier had pointed out to the assembled officers on the map (for the undulations of ground concealed it from view) a spur connecting the enemy's ridge with the ground now occupied by our first line, and had indicated it as the key of the position and the principal object of attack. The officers had therefore been prepared, and had made arrangements for seizing the spur. The supports and reserve of the first line are concentrated as nearly opposite to it as the ground will admit. The artillery shell the higher parts of the spur, and all the ground in the neighbourhood of its junction with the main ridge.

If the Brigadier can attract the enemy's attention by a feint in another direction with his cavalry and some infantry, it will be useful. The preparations are complete, and four companies of the first line ascend the spur in skirmishing order, more or less extended, according to the extent of front. We require them now to be rather thick; they must *swarm* up the spur, but they must not be huddled together, and, if necessary, one or more companies are kept back to avoid this; still, if not actually in front, they keep very little behind, so as to be ready to take their place in front at the first opportunity. The advance is made by alternate sections, by a succession of charges of small bodies, covered by the fire of the rest. The resistance is now vigorous. Whenever it is too strong to be overcome by a front attack, the assailants extend outwards, and work round the flanks. The two original skirmishing companies, having closed upon the spur, follow the movement under command of the Colonel, who employs them to support it. If the enemy makes a charge, he is there with his reserve deployed to receive them. Should our skirmishers be momentarily checked and driven back, he receives the pursuing enemy with volleys, and perhaps also with a charge. The skirmishers quickly rally; for good soldiers, even if repulsed by superior numbers or by a sudden attack, never run far when they find friends close at hand. Mean-

while the second line deployed, has occupied the sheltered position vacated by the first when it commenced its last advance. Its Colonel watches the progress of the action. Seeing that the first line is making its way up the spur, he concludes that the enemy must be concentrating his forces to oppose it. He thereupon orders his battalion to advance against the other parts of the position. The Brigadier brings up the third line to the neighbourhood of the spur, and perhaps detaches a part of it to reinforce any troops hard pressed. The second battalion advances, with part of its companies extended, the rest following in line. No hesitation now. The battalion must push on. Very little firing even from its skirmishers; of course, none at all from the remainder. The opposition is comparatively slight, because the enemy's attention is chiefly directed to the head of the spur, and because the fire of our batteries has paved the way for us. Still our losses as we ascend the open slopes are considerable, and we feel that the sooner we come to close quarters, the better. We cannot do better than follow the simple tactics of the first line, i. e. the alternate advance of small bodies. The companies which have not extended, and whose number depends upon the extent of front, are kept in hand by the Colonel as a support, to be used, however, offensively on occasion, as have been the supports in first line; and the occasion to do

so probably arises when the enemy makes a last vigorous attempt to repel his assailants. The whole second line unites in a charge, and the position is ours ; the first line having also established itself firmly on the ground it has won. The pioneers are hard at work, preparing a way for our batteries, which come up as fast as they can, together with the cavalry. The Brigadier, with his reserves, is also to the fore, and decides whether to pursue, or merely to hold what we have occupied.

This sketch of an imaginary combat will probably suffice to show the general principles upon which, we think, infantry should act when on the offensive. Of course, illustrations might be varied *ad infinitum*. What we wish chiefly to impress upon our readers is, the all-important part which company officers will have to play in warfare, if our opinion be correct that it is necessary to adopt, in a more or less modified form, the Prussian system of tactics. In fighting of this sort field officers can do little in front line ; there will not be time for Captains to send for orders ; they must act for themselves at once ; and the fate of a battle will depend much more than it did in former days on the intelligence, military skill, and decision of the inferior officers. Captains must, above all, be accustomed to take responsibility upon themselves. The habit of command will alone induce them to do so. They must always, as are

the Prussian Captains, be *really*, not *nominally*, the company commanders. The whole discipline and instruction of their officers and men should be under them, without interference from any one except the commanding officer. They should be *really*, not *nominally*, responsible to him for everything connected with those under their command ; having thus a great deal more to do than they have now, they should also have more power of reward and punishment, and (if the country can afford it) higher pay.

This might well be given them without much extra cost, if, as we believe, regimental quarter-masters and musketry instructors can be dispensed with, the duties of these departments becoming part of company work. Under the system advocated, the adjutant would become, what he is in Prussia, merely the commanding officer's staff officer, secretary, and A. D. C., and Captains would be emancipated. Our military readers will understand what we mean by this expression, without the necessity of going into further particulars. But we had well nigh forgotten to mention another very important and desirable result which would follow the increase of power and the higher position given to Captains—namely, the good effect it would have upon the minds of the men, and therefore upon *discipline*, without which the best possible arms and training will be thrown away.

Men will obey a leader much more readily, and

trust in him much more completely, if they have always been accustomed to look up to him as their immediate protector and judge, and the great authority to whom they could with confidence refer on all military matters, as well as on matters affecting their own interests. From the day he joins as recruit to that on which he leaves the service the soldier must be trained to look up to his Captain with reverence and affection; not only the *private* soldier and non-commissioned officer, but the subaltern officer, and, as far as possible, officers and men once posted to a company should always remain in it. As the company in its own sphere should be sufficient to itself, so should the battalion be. No outsider should be required to assist in its training. The whole battalion should be accustomed to look up to its Colonel with the same reverence felt by the company for its Captain. Of course this will depend in great measure upon the personal qualification of the chiefs; these again will depend upon the system; the material being good, as it is assuredly, a good system will produce good officers and an army which will be a match for any in the world. We say an *army*, because, though the subject of this paper is "Light Infantry," we feel certain that the foregoing remarks, which are supplemental to those upon tactics, are equally applicable to all arms of the service.

CHAPTER VII.

MODERN CAVALRY.

REGARDING an army in the light of a machine, how shall we define its motive power? Is it the will and order of a commandant? If so, the motive power of a locomotive engine is the will of a driver, whereas we know that motion is derived from fire and water, and that the driver is not the power, but the controller of power. Whether the actual motive power or not, unquestionably emulation and rivalry supply a "vis viva" to an army — emulation between individuals, rivalry between fragments or integral portions of force; between small arms and cannon; between horse soldiers and foot. As one branch of the military profession excels, another tries to exceed in excellence; thus energy begets energy, and the onward flow of progress meets no check. The pride of place is never left undisputed nor unchallenged.

Look back into the world's military history for a century. A hundred years ago a battle might be begun, continued, and ended by cavalry. Happy was the General commanding a prepon-

derance of resolute squadrons. Then arrived the day of light guns and explosive projectiles, and artillery assumed a formidable front; the use of rifles, however, placed infantry clearly in the van; but again guns have been rifled and made more mobile. At the present moment small rifled firearms dispute the lead with large rifled firearms, whilst cavalry is of little account. By bold daring, the horsemen of Germany contributed in a marked degree to the victorious issue of a campaign and a transient halo hovers over the cavalier. The object of these pages is to strengthen the weaker of the sister arms by provoking discussion on matters appertaining to modern cavalry. And we venture to assert that this can be brought about in two ways only. Either discover a new use for cavalry, or supply the dragoon with a firearm not inferior to that used by foot soldiers. Nor is there any bar to the combination of these two methods.

A new use for cavalry was discovered and practised by the Confederate Southern, and afterwards by the Northern States of America, in their late civil war. It will be remembered that the Southern, under Stuart, acted with effect on the communications of their antagonists, destroying telegraphs, railways, convoys, and stores. It was more a force of cavaliers than of cavalry; men, mounted on horses, provided themselves with firearms, crowbars, and axes, and merited in every

sense the name "Irregulars." A sword was useless lumber to such men. If opposed they dismounted and used the rifle. After suffering, the Northerners retaliated by organising a force of cavalry armed with repeating rifles and trained to dismount and act as infantry. These men came up to Marmont's definition of a dragoon, and fought "indifferently" on horseback or on foot, but when used as infantry they proved invaluable, and mainly caused the annihilation of General Lee's army. The writer would call attention to the graphic history of General Sheridan's final campaign, and the deductions from it by Sir Henry Havelock.

The Americans launched their cavalry—i. e., their mounted infantry, at their enemy's communications both tactically and strategically. The Germans, on the other hand, used their horse soldiers as an insect uses its "antennæ;" but the Germans have several descriptions of horse soldiers. Their tactical cavalry consists of cuirassiers, and in future campaigns probably the "Uhlán" will also be kept for "shock" purposes. The total demoralisation of France enabled the "Uhlán" to act as light cavalry in 1870; but the lancer is, and should be, a heavy man on a powerful horse. The Prussians had two reasons for keeping the cuirassiers alone in the tactical line of battle. First, the French after Sedan possessed

no cavalry. Second, the horses could be more easily foraged far and wide in an enemy's country.

Heavy cavalry, including lancers, are then essentially "shock" cavalry. Dragoons and hussars are light cavalry, and the duties of light cavalry can be learnt by a study of the last American and the last German campaigns. In the writer's humble opinion a more practical lesson is to be derived from the former than the latter; simply because the firearm was brought into action—not a "pop-gun" in the hand of a mounted skirmisher, but a rifled arm of precision in the hand of a dismounted marksman. Now, can any one explain the use of mounted skirmishers, according to the British acceptation of the term? A brigade of cavalry, with horse artillery, is ordered to throw back a flank or make a retrograde change of position, covered by mounted skirmishers. (This is one of our stock manœuvres.) What happens? One or more squadrons with weak supports spread themselves over the plain, and deliver their fire in the air over their horses' heads, whilst the movement of the main body proceeds. Do these so called skirmishers menace or impede the imaginary enemy, be he mounted or dismounted? Assuredly not. Advancing cavalry would take no heed of them, or cut them off in detail; advancing infantry would put a bullet into them. Meanwhile the fire of your artillery is

more or less masked, and the strength of your main body has been disastrously diminished. What would these sacrificed squadrons be worth as a reserve ?

Our mounted skirmishing drill is a thing of the past. Send out your flankers, send out your feelers, send out officers with escorts mounted to give intelligence by signal or by message ; but if firearms are to be used for offence or defence, dismount your marksmen, and avoid wasting cartridges.

A few well posted groups of dismounted men may set a mounted brigade at defiance. Then again, if the men are well concealed, who can tell whether the fire is from cavalry or infantry ? Thus, and thus only, cavalry may impede the advance of infantry now-a-days. On cavalry outpost duty, as a matter of course, the carbine should never be fired from off the horse's back, except as a signal. There is no reason why a light cavalry outpost should give way even to infantry without a serious regular attack. A dragoon ought to be as well able to scratch a hole or form an obstacle as his neighbours, and his spare time could not be more profitably spent.

The Russians are readers and believers in the writings of Marmont. They mix up the various arms in one regiment. Thus one regiment may be able to supply carabineers for outpost duty, lancers in the front rank at the charge, and swords-

men in the rear rank for the *mélée*. But the Russians are too crafty. The calibre of their guns is a trifle larger than that of other nations, so that their ammunition, if taken, may not avail the enemy; whilst if fortune favours their side, a slight addition enables them to utilize what they capture. Again, the gauge of the Russian railways is peculiar, so that an invader will have to create rolling stock. The Germans would have experienced some trouble had the French played this trick, for the existing rolling stock can easily avoid capture.

With our numerically weak regiments, a mixture of arms is not to be thought of. The desired combinations can be made in brigade. To form a lancer brigade, consisting of two lancer regiments and a battery of horse artillery, would be sacrificing utility to appearance. The want of small firearms would be continually felt.

When a battery has taken up an advantageous position, and come into effective action, the nature of the ground will often render it impossible for a whole lancer brigade to repel the attack of a handful of light infantry. The battery is obliged to limber up. Dismounted dragoons would prevent this necessity.

The right place for a lancer regiment then is in the tactical line of battle, and the same may be said of all heavy cavalry; and during the first stages of a battle they should be in "echelon" on

the flanks under cover, and within hail. They can also do escort duty on the lines of communication, escort prisoners, &c. The only firearm required by this class of cavalry is a pistol, with a range not exceeding ten yards, double barrelled. For reconnaissance, escort of artillery, raids and outpost duty, you require dragoons and hussars. The primary weapon mounted should be the straight sword, made exclusively for pointing, and this should form part of the horse.

Dismounted, the only weapon should be the carbine, which should form part of the man.

In the British army there are seven dragoon guard regiments and five lancer, together with sixteen dragoon and hussar regiments. Any one ignorant of the natural enmity of the British organiser to things simple, would infer that we possess seven shock sword regiments, five lancer regiments, and sixteen light regiments; but it so happens that the 1st and 2nd Dragoons are our heavy regiments—so heavy that they, together with some dragoon guard regiments (ordained to be more ponderous than their brethren) escape their tour of Indian service. The writer is unable to explain the anomaly, but he considers himself bound to explain why the three regiments of household cavalry are excluded from this list of our effective forces. The simple reason is that the writer does not consider these regiments effective out of England. They are the bodyguard of the

sovereign, and they perform their functions to perfection. Whether the country will long continue to vote the large sum of money necessary to keep up this magnificent body of men and horses is a question. Warned by the signs of the times, might it not be wise to make a virtue of coming necessity, and at once submit to Her Most Gracious Majesty a scheme for making the Guard of Royalty the finest heavy cavalry in the world? The day may arrive when a king of England will once more head an army in the field, or another 1814 may require every available soldier in hostile array out of the United Kingdom.

Imagine for a moment our cuirassiers going through the work recently required of the cuirassiers of the Prussian guard. Compare the men, compare equipment, compare horses.

The life guardsman is taller than the cuirassier, but if one calculates bulk by multiplying the number of inches round the men's chest into their height the Prussian would probably have the advantage. But it is not with the men the writer wishes to pick a quarrel. When weeded out (by exposure and work) the remnant would present perfect specimens of humanity. The difficulty is horsing these giants. Now this difficulty ought to be imaginary. Why should the Germans succeed in procuring horses well up to twenty-four stone if we fail?

In the first place we have chosen a rare colour ;

in the second place we offer less than the market price.

If our cuirassiers are to be transformed into serviceable cavalry take the tinsel from their manly bosoms, lighten their horse appointments, and supply animals well able to carry the weight. When a horse ceases to be serviceable through old age or infirmity, let it be sold and replaced. No horse ought to be retained in our cavalry after the age of sixteen. If at that age the beast remains sound a good price is obtainable in the open market ; but the few horses kept in this country during peace time should be sound and serviceable. It is false economy in every way to retain animals till they are only fit for the knacker's yard.

The principle of keeping up a limited number of cavalry horses in peace time and training say one-third more men is a perfectly sound one, if a good price be paid for five and six year old horses when war breaks out. It takes quite two years to train the rider ; but horses untrained for war would be perfectly manageable in the ranks after ten days' marching.

The writer knows too little about the clothing of the household cavalry to render any valuable criticism.

Lovers of the chase would soon give up "leathers" if they had no servants to clean them, and servants would hardly give satisfaction with-

out the aid of an article not easily carried on service—"breeches trees." Then, again, there are boots and boots, as the following anecdotes will prove:—

A Cornet, of the breed now becoming extinct, chanced to sojourn at Baden-Baden, when the Grand Duke came to blows with a neighbour. The officers of a Baden cavalry regiment were quartered at our hero's hotel.

The gallant regiment received timely notice that blood ought to flow at a given hour on a given morning, and, of course, a big drink came off on the eve; also, as a matter of course, the Cornet was thereabouts. The Baden cavaliers retired early to rest, before the Cornet's roosting hour. In obedience to orders, a pair of well polished long boots stood sentry over each warrior's bedroom door. Now, by retiring early to bed, the Baden army seemed to have transformed the friendly and convivial Cornet into an implacable enemy. Two monosyllables proclaimed this fact to the empty "*salle à manger*"—"bad form." To arrive quickly at our moral, it is only necessary to state that every pair of boots was that night half filled with water; still not a warrior absented himself from parade. The language echoed through the hotel corridor at dawn happily was heard by few, and need not be repeated.

In Ireland, not many years ago, a general officer ordered two cavalry regiments under can-

was at the Curragh, to parade at a given hour near the Curragh Railway Station. The General and his Staff arrived from Dublin at the appointed hour, but searched in vain for troops. The Staff flew to camp, and brought back a message :—
 “ The Commanding Officers were using their best endeavour to obey orders ; but the rain had penetrated the men’s tents, and the troopers could not get their boots on.”

Another important article of the dragoons’ clothing would have given similar trouble had it been of leather.

When dragoon reformation begins, the regimental Standard must not escape due notice. Time was when Standards played a part in glorious war ; now the gaudy emblazoned device causes an infinity of trouble, and demands (in the field) the undivided attention of three senior experienced non-commissioned officers in peace time only.

No more vexed question troubled the rest of our last Inspector-General of Cavalry than the proper position for a regimental Standard.

The Standard does not go to war, but to a banker’s lumber-room. One can understand the love of soldiers for a tattered rag, on an historic pole. Colours which have habitually led the way through danger to victory, become a regimental idol ; but, unquestionably, the permanent abiding place for a peace-enjoying Standard is the chancel of a

church. None the less, but rather the more, will a symbolic Standard flutter in every soldier's heart, for the absence of bunting need not of necessity shake allegiance. If light cavalry and lancers can exist without Standards, why cannot other regiments be relieved from the incubus? These remarks do not apply to the Household Cavalry as at present constituted, which rejoices in a Standard per squadron.

Since Waterloo, cavalry in general has undergone no very important change. The Prussians seemed to admire what they saw of our equipment in 1814, and their saddlery and appointments now resemble what ours were then. The saddle itself has of late been improved and simplified. The Prussians possess a better and lighter saddle than we. It consists of two flat side-boards, with a light metal bridge in front, forming a gullet plate, and a light metal bridge from board to board also takes the place of a cantle behind. The framework or saddle-tree is quite rigid, and a leather seat with flaps completes the saddle. The girths have three bearings on each side in place of one. This prevents the saddle rocking with the man. The saddle is placed on the top of a folded blanket, and of course sore backs are plentiful. The writer thinks that the unpadded side-board on the top of a thick numnah would not give sore backs to horses in condition. Then the side-board must be planed off to suit each back, and the girth must be on the Prussian prin-

ciple. At all events, the British saddle can and ought to be improved. The Prussians carry no valise; their "kit" is, so to say, built up under the old-fashioned "pilch." It will hardly be credited, but it is, nevertheless, true that with us only one form of bit is served out for our cavalry horses. One must infer, then, that every horse possesses the same width of jaw, and the same stubborn will; the same cruel "port" tortures the tractable and gentle, as coerces the obstinate and vicious. There used to be such a thing as a high "port" and a flat "port," a narrow bit and a broad bit, when Colonels supplied these articles; why not now? Considering that the mouths and wills of horses vary no less than those of human beings, a retrograde step in this instance may be advisable, and not in this instance only.

Some ten years ago cavalry moved by "threes" (the German cavalry does so still), and the squadron was divided into four divisions. A change was made from "threes" to "fours;" the distance between the front and rear rank being at the same time increased from half a horse's to a horse's length. In place of wheeling on the centre of three, the sections revolved on the outer of four, and each horse had a clear eight feet in front under any circumstances. To bring this advantage about, much, however, was sacrificed. In the humble opinion of the writer, the three system with divisions, and eight feet between ranks, is far preferable to the four system; still,

possibly, change is good, tending as it does to awaken the intellect.

The intellect was again roused four years ago by the introduction of new drills. An officer reported in favour of the Austrian drill, after being sent specially to Vienna. Three boards of officers voted it more simple; and the drill would have been tried, had not the officer of highest rank in cavalry (the Inspector-General) *improved* (?) upon the German idea. The amended drill was tried, and found wanting.

The German drill did not receive a fair trial; and the old drill-book, with a slight change in names, again became law.

On the principle that the “Pons asinorum” ought to be retained in the First Book of Euclid, cavalry drill should not be rendered too simple; still, the method enabling a regiment to show a front quickest, without complication in manœuvre, or possibility of confusion, must be the best for service.

Another abortive effort at reform was made two years ago. The “squadron system” was introduced—i. e., the squadron became the unit in place of the half-squadron or troop. The writer never quite understood why the novelty (as regards this country, but not as regards other countries) was arbitrarily condemned. Generally, no action is taken in this country without commissions, boards, and counter-boards. Therefore,

the condemnation of the squadron system took soldiers by surprise. An event just accomplished is hardly fair history, so the subject had better be changed, or, the reader will rather say, concluded.

To sum up, then :—

The cavalry of Germany, in 1866, differed in no way from the cavalry reorganised in 1815.

Even after campaigns wherein modern fire-arms were used, the cavalry underwent no revolution.

In 1870 the same old-fashioned cavalry, by dint of energy and intellect, made for itself a world-wide renown.

The cavalry of England at the present day is in no way superior to the cavalry which carved for itself a glorious name in the Peninsula. There is a grand field open, and it is to be hoped that officers in the professional army of the future will take advantage of the 'opening. Although the need of cavalry is admitted, the arm is fast falling into disrepute. Let the shortcomings of the service be discovered, and remedied previous to, and not after, the next European war.

The writer is unable to put down his pen without courting popularity with the spirit of the age, by pointing out a practical economy. The cavalry horses of England are nurtured too softly, or, rather, are too well cared for, and too pampered after arriving at a serviceable age. The stables

are too close, and the ration of forage is in excess of what horses require on light work.

The German horse receives 9 lbs. of oats (equal to our 10 lbs.) and 6 lbs. of hay. Allowing for a difference between German and English lbs., the German horse gets 5 lbs. less hay per day than our horses in peace time; and, note, on service the German allowance is 3 lbs. of hay per day. It is probable that this law was not strictly carried out when Germans *borrowed* their forage in France, for the condition of their horses was superb.

The writer only proposes to save the country £10,000 per annum, by reducing the allowance of hay for a cavalry horse two pounds per day, and will stake his anonymous reputation that a regiment on the reduced ration will not show inferior condition to a regiment with the full twelve pound ration.

Let veterinary surgeons storm, let them point out the certain ruin of the half-grown remount, the writer then answers, rob the old to feed the young; because each horse is allowed twelve pounds of hay, that exact weight need not be given to each. When you see a trooper distended to twice his normal and symmetrical bulk, ease him of a little hay and don't let him take a revenge out of his bed (if you can help it).

The opposing argument to make use of is, that

a horse at large eats continually, and requires food continually. Granted ! prevent your horse, then, from wasting or consuming his ten pounds of hay too rapidly.

The writer carefully abstains from decreasing the ration of a horse performing heavier work, for there exists no greater enemy than he to the penny wise and pound foolish school.

The army of England is too costly, and it behoves every true soldier to point out waste of public money. The responsible civilian minister has neither time nor opportunity to search out minutiae. When called upon to diminish the army estimates he must needs diminish the nation's defensive strength. By curtailing fruitless expenditure the soldier may merit the name of a two-fold patriot.

Cavalry reform or regeneration must spring from cavalry officers. The arm has fallen into disrepute. Where is the *vis viva* ? Will no effort be made to restore its prestige and renown ?

NOTE.—*The exact Forage Ration in Prussia.* (N. B. The Prussian lb. is one-tenth more than the English lb.):—

PEACE (<i>per day</i>).			
	Oats. lbs.	Hay. lbs.	Straw. lbs.
Heavy ration for large-framed horses, .	9½	5	7
Light „ for Light Cavalry, . . .	8	5	7
WAR (<i>per day</i>).			
Heavy ration, with as much more as they can lay hands on,	11½	3	3½
Light do., do.,	10	3	3½

ON AID TO THE SICK AND WOUNDED IN
WAR.

A LECTURE DELIVERED AT THE ROYAL UNITED SERVICE INSTITUTION.

(Authors alone are responsible for the contents of their respective Memoirs.)

(For private circulation only.)

LECTURE.

Friday, March 31st, 1871.

FIELD-MARSHAL H.R.H. THE DUKE OF CAMBRIDGE, K.G.,
G.C.B., Commanding-in-Chief, President of the Institution, in the
Chair.

ON AID TO THE SICK AND WOUNDED IN WAR.

By Lieutenant-Colonel R. J. LOYD-LINDSAY, **W.C.**, M.P., Chairman of
Central Committee, National Society for Aid to the Sick and
Wounded in War.

FIVE years ago a lecture was delivered at this Institution by Dr. Longmore, C.B., Professor of Military Surgery at the Royal Victoria Hospital, Netley, on the Geneva Convention, and on National Committees for aiding in Ameliorating the Condition of the Sick and Wounded of Armies in time of War.

The interesting narrative which Dr. Longmore gave in his lecture, of the circumstances which led to the Congress in 1864, and of the Treaty which resulted from it, turned people's attention for a short time to one of those remarkable movements which spring up in the world from time to time, and are frequently claimed by individuals as of their own origination, but which in reality arise from a general and simultaneous *growth* of public opinion in a particular direction, but which individuals are often enabled to concentrate and unite in a practical form. Such was the character of the movement which originated in Switzerland, and led to the Congress of Geneva. A somewhat similar case is seen in our Volunteer movement, the implanting of which amongst the institutions of the country is stoutly laid claim to by at least a dozen rival, but unfortunately equally unappreciated originators of the force.

The conviction which results from the study of history from the earliest period down to the year 1871, offers no escape from the conclusion that as long as men are born into the world, constituted as they are by nature with instincts both for good and for evil, which soon develop into feelings representing rival interests and rival objects, which can only be attained by striving one man against another, so long will wars and rumours of war continue to prevail among us.

Believing, therefore, in the continued prevalence of war among nations, some men have turned their attention to plans and schemes which have for their object the softening of sufferings and sorrows

which fall upon those who, although not themselves responsible for war, are necessarily the most severe sufferers from its effects.

Perhaps there is no time in which the value of money is more personally brought home to men than when life and limb are threatened by disease or accident, and when through its agency the resources of science can be brought to the aid of suffering humanity.

The noble institutions which abound in this country, many of which owe their origin to the benevolence of former generations, and their usefulness and efficiency to the constant and present devotion of the most scientific and skilful physicians and surgeons of the community, furnish to the poor man freely and gratuitously all these extra chances of restoration to health and strength which are enjoyed by the rich.

For generations these institutions have stood among us as monuments of civilisation and humanity, and they should be regarded with feelings of pride and satisfaction by those who watch for the gradual but permanent growth of goodness and benevolence among mankind. At the very period of the foundation in London and Paris of many of these hospitals and institutions, the establishment of which proves that civilisation and humanity were moving men's minds and thoughts in and around their homes, the most barbarous and cruel indifference to the wants and sufferings of the soldiers who were fighting their country's battles abroad, was almost universally displayed.

The journals and records of the French military surgeons in the Peninsular War abound in admissions that the greater part of the wounded usually perished for want of help, and there are not wanting records of the miserable condition of the sick and wounded of our own Armies also during those campaigns. Going back to earlier days, we hear of the time when the sick and wounded were habitually abandoned in the towns and villages, and even on the road-side, and on the battle fields, in which the State never even recognized its obligation to assist them.

More merciful and humane ideas than those which I have described, have indeed long existed among nations and among their rulers, but it has taken time, which may be measured almost down to the present generation, to recognize fully the absolute obligation which rests upon nations who send out armies to fight their battles, to provide such assistance both in *personnel* and *matériel*, as will lessen the sufferings which must befall those who chance to become the actual victims of war.

We appear to be now living in times when wars are made by nations in arms and when all able-bodied men, however peaceful their vocations in life may be, must be conscious that the time may come when a rifle or a sword may be thrust into their hands and they may be called upon to fight in the ranks of an Army with no higher grade than that of a private soldier. We need hardly, however, imagine ourselves placed in this position to induce us to do all that trouble and expense can accomplish, in order to secure for the regular soldiers of our Army the best chances of recovery should they be struck down by wounds or by disease.

It is now an admitted fact that any provision which Government can

maintain for the service of the sick and wounded in time of peace is invariably inadequate to meet the enormously increased demands which instantly spring up at the commencement of war. The great problem which Governments are now endeavouring to solve in their Armies, is how to constitute their ranks in such a manner as to be capable of rapid expansion and of rapid contraction. How to have large reserves of men ready to serve when wanted, and ready to return to their own employments, independent of Government support, when not thus required.

The difficulty of satisfactorily solving this problem for the Army appears likely to baffle at least the Government of this country, but the difficulty of solving the problem of that which relates to the service of the sick and wounded, does not appear equally difficult of solution. A slight sketch of what has been done during the recent war between France and Prussia by the English National Aid Society may serve to illustrate its procedure.

The Society has worked by means of the machinery supplied by the Articles of the Geneva Convention. These articles may be classed under two heads: 1st, the formation of National Committees in Co-operation one with the other; and 2nd, the Privilege of Neutrality which is afforded to those working in aid of the Sick and Wounded in War. Before proceeding further, it may be well to remark that the Geneva Convention appears rather to contemplate that National Committees should aid their own armies and not those of foreign nations; and it must be observed that the National Society would have found less difficulty in its operations had it been working in aid of an English Army instead of assisting those of France and Germany. The sudden outbreak of a war, in expectation of which those two nations had been preparing and arming for years, took diplomatists and statesmen in this country entirely by surprise. Nevertheless, within a month of its declaration, more than a million of men were under arms and closing in upon one another. The accounts which reached this country of the improved weapons of destruction; the famous breech-loading rifle, never before used on both sides in a war; the newly-invented mitrailleuse; the enormous masses of artillery; all tended to prepare the minds of men for a contest more gigantic and more destructive to life than any which had taken place within the memory of man.

The nature of the quarrel which sprung up between these rival nations left England as neutral and impartial in her feelings as the greatest admirer of the Peace Society could possibly desire, but that very impartiality favoured the display of sympathy and concern for the fate of the many thousand sufferers who must fall victims to the war.

On the 4th of August a Committee was formed, of which His Royal Highness the Prince of Wales was president, and Her Majesty the Queen soon after became patroness. The illustrious Duke, the President of this Institution, also gave his name and sanction to the Committee. A Ladies Committee was also formed, of which Her Royal Highness the Princess Christian of Schleswig-Holstein was the Chief. One of the first acts of the Committee was to place itself in com-

munication with Her Majesty's Government, in order to obtain official recognition, and in order that the aid which the Society proposed to send out to the sick and wounded might be transmitted with the sanction of Her Majesty's Government.

On the 4th of August Mr. John Furley, one of the earliest advocates of the adoption of the Geneva Convention in this country, and who was only second to Captain Burgess, our most indefatigable secretary at St. Martin's, left England at the request of the Committee to visit the President of the Geneva Committee, and also the members of the Committees in Paris and Berlin. In order to ascertain from them the precise mode in which the assistance of the newly-formed English Society might best be given, Mr. Furley reported, "I spent six hours in Paris, four in Geneva, and twelve in Berlin. As I passed through France the news of the first Prussian victory had not yet arrived, and at Geneva the earliest reports of French reverses gained but little credence. The frequent telegrams, however, which a few hours later reached Lausanne, Berne, and Zurich, would not admit a doubt. All the steamers on Lake Coustonce were gaily decked with flags, and at night bonfires and rockets on the German shores testified to the joy of the inhabitants. In the early morning of the 8th, in answer to the summons which rang forth in every spire along the hill sides and through the valleys of Bavaria, hundreds of men and women, and children, were to be seen wending their way to the various churches to join in a general thanksgiving."

The battle of Wissembourg had been fought, and the result was that hundreds of wounded men were being carried to the rear, and long trains of prisoners were seen on their way to the fortresses of Germany. The battles of Woerth, Aug. 6, and Forbach rapidly followed one upon the other, and on the 21st August Sir Henry Havelock wrote as follows from Port à Mousson:—"It makes me sick at heart to see the scenes of suffering that cannot be relieved, first for want of proper appliances and aid, next because the surgeons are too few for the work. All the French wounded have fallen into the hands of the Germans, and they have been treated like their own people, without the slightest distinction of nationality. Some of them have told me 'Nous avons été soignes comme si nous etions des freres, par ces autres.' It is lamentable to see the mass of human suffering here. The two sides have left nearly 20,000 wounded in German hands, and there are actually numbers of wounded here struck on the 16th and 18th (to-day is the 21st), who have only had their wounds dressed on the field when hit, and never since. You know well what suffering this entails. It is simply impossible to do more for want of hands and of appliances."

At this time the London Committee were overwhelmed with letters and suggestions, passionate appeals from home and from abroad, and strong remonstrances at the want of immediate aid being forthcoming on the field of battle. Five years before Dr. Longmore had predicted in this room, in the lecture to which I have alluded, the precise thing which occurred. He said, while urging the formation of a national committee in England, "if this remains undone, you will be at a dis-

advantage." "Committees will be formed, subscriptions will pour in, but, as heretofore, there will be an absence of system and independence of action."

Fortunately there was one marked difference between the circumstance under which we were working from that which Dr. Longmore thought might arise; we were working in aid of foreign armies, and not with the weight of responsibility of having an army of our own in the field.

The Committee sprang into life under the influence of accounts of suffering which had already commenced, and which had to be dealt with by arrangements which were neither preconceived nor systematized. Prompt and rapid action was necessary, and the Geneva Convention afforded machinery which was found ready prepared to our hands.

That the Geneva Convention has worked beneficially in aid of the sick and wounded is universally admitted. That the articles of the Convention have been abused and require extensive alterations cannot be denied. A reliance, somewhat too extensive in its character, was at first placed in its rules, which were in many cases neither understood nor recognized by the belligerents. The surgeons who were sent out at the special request of the French and Germans were unrecognized and unemployed, because they were not properly accredited as members of the Society. There was no means of obtaining the sanction of those in authority for our surgeons to give aid, neither was there any means of obtaining proper information as to where to give it; nevertheless, the spirit of those who went out on the business of the Society overcame these difficulties. "Every person whom we met," said Mr. Hart and Berkeley Hill, "employed on the business of this society was animated by the same excellent spirit. Ready to do anything which would serve the objects for which they were despatched, ready, in the case of surgeons, to undertake the most arduous responsibilities in the case of large numbers of severely wounded men, often under most serious disadvantages as to shelter, attendance, and food; equally ready to lay aside scruples of professional etiquette, and to work under the direction of men both junior and of less firmly established professional reputation than their own."

When quoting the report of these gentlemen, it is, however, fair to add that many parts of this report are not so favourable to the working of the Society as that here given. The full report will be found in the "Times" of the 8th October, and I would only further remark that its general tenor goes to show the necessity of having preparations systematized and organized on a well-considered and preconceived plan, and I sincerely trust that some public spirited persons may be found willing and ready to undertake this task, which may be somewhat assisted by the experience gained in this recent war.

Towards the close of the month of August, the subscriptions to the National Society amounted to about £30,000, and the Central Committee at that time reported that they had 40 surgeons serving under the Red Cross Society, engaged in the field, or at the hospitals formed

in France and Germany. The French authorities had not only laid aside all distrust, but had gratefully accepted the co-operation tendered them by the English society. On the 26th August Dr. Frank, who had been sent out as the representative of the Society, writes from "Paris:—There seems every hope of our being able to start for the North "on Sunday, and if we really should succeed in doing so, I shall be "amply rewarded for the weariness and disappointment at the days "spent in this place—days utterly lost, as far as the real aim of our "mission is concerned." And then he adds, "In the long run they "may prove not to be badly spent after all." And so, indeed, it turned out, for on that Sunday there left the Palais d'Industrie a body of men animated with an amount of enthusiasm which carried them through the most arduous and trying times of the campaign. The history of the Anglo-American ambulance is a history of relief rendered to the wounded at the most critical period of the campaign, on the battle field, and under actual fire. Neither hardship nor danger ever diverted the surgeons of both nations from their noble duties, and to the end the most uninterrupted respect and confidence existed between the members of the Staff. On leaving Paris, Lord Lyons laid special stress on their operating in French territory.

In Germany the Committee had entered into an alliance with the German Aid Society, and established a joint international field hospital at Bingen, on the Rhine, constructed on the modern system of tents and isolated huts, which, whenever adopted during this war, has proved so highly conducive to the well-being and recovery of the patients. But the vicissitudes of war caused Bingen to be somewhat too remote from the actual scene of conflict for its capabilities to be as fully utilized as had been anticipated. Indeed, the operations of the Society throughout Germany have been necessarily of a somewhat different nature from those carried on at the actual theatre of the war, and have consisted chiefly in sending out supplies of *matériel* and aid in money to the numerous hospitals throughout Germany, to which wounded and sick men were sent in such vast and continuous streams as almost to exhaust the efforts, energetic and well-sustained as they were, of the various local native "Aid Societies" and Committees. The English National Society has proved of great use in supplementing these efforts. It commenced its operations by dispatching Captain Douglas Galton, C.B., accompanied by Mr. H. T. Bonham-Carter, on a tour of inspection of the hospitals of the Rhine district, in the month of September Dr. Mayo was subsequently appointed chief surgical representative of the Society in that district, and the hospital constructed by him at Darmstadt, chiefly for the reception of patients suffering from typhus and other diseases, has achieved highly satisfactory and successful sanitary results. Though still under Dr. Mayo's active management, it is no longer under the control of the Society, having, in the month of February, been handed over to the charge of the German authorities at Darmstadt. The state of the wounded on the Luxembourg frontier was during the latter part of August, truly heartrending.

They had neither bread nor water, and even the surgeons could not stay with them for lack of the barest means of sub-

sistence. The slaughter often happened in the manner and at the place least foreseen, and no sooner had stores of food and surgical instruments and appliances been sent to one place, than they were instantly required in another. The mass of French wounded in particular who were accumulated on the German borders, induced the Committee to concentrate its force, and make Luxembourg its chief base of operation. This neutral island in the midst of the storm of war, was thought likely to afford a most advantageous situation from whence to carry aid to those who had been wounded, and were lying on the battle fields round Metz. The exertion of the agents of the Society were most praiseworthy. They opened communication by road with carts and horses, carrying out food, and bringing back the wounded into cover and shelter; but with all their exertions the carnage was so enormous in its extent, that their organization was able very slightly to relieve the suffering. Meanwhile, the affairs of the Society at home had assumed a very different character from that which they originally bore, when the utmost expectation of the Committee was bounded by a hope that they might be able to send out some surgeons and nurses to give supplementary aid to the field and permanent hospitals in France and Germany, and likewise to furnish some surgical instruments, medicines, and disinfectants, such as chloroform, and carbolic acid—things which, from the circumstances of the war could best, and, perhaps, only be obtained in England.

But, as was said at the time, greatness, at least of work, was thrust upon the Committee. Meetings were held in every part of Great Britain, and the public, reading day by day the history of the war, with all its harrowing details so vividly described by the writers of the English press with the armies in the field, were unable to confine themselves to mere words of sympathy, but showed their feeling by contributing both in money and "*matériel*" more largely than has ever previously been done at any former period.

The constitution of the Society at this time was briefly as follows:—A Central Committee and a Ladies' Committee were assembled in a block of three houses, lent them by Government, in St. Martin's-place; Local Committees, the sources from which aid in money and *matériel* were chiefly received, were formed in almost every town and district in Great Britain. The functions of those working at St. Martin's naturally divided themselves into two departments, viz., that which related to gifts in goods, and that which related to contributions in money. The Ladies' Committee controlled and managed the former, receiving, unpacking, sorting, repacking, and acknowledging things sent, making known the chief requirements abroad, corresponding with Local Committees, keeping statistics of material aid received. To this was added the management of the vaults and store-rooms, and the direction of the storekeepers and packers. The deliberative and administrative business of the Society was in the hands of the Working Committee, who selected and dispatched the agents abroad, and controlled, within certain limits, their conduct and procedure; they received deputations and letters, and afforded information to subscribers concerning the Society's operations; they dealt with requests from existing

foreign societies for supplementing resources and gave them assistance to carry on their work. This, together with securing facility of transport for persons and goods through districts broken and disturbed by war, formed some of the duties of the Central Working Committee.

To carry on a well-developed and widely-embracing scheme of operation such as would give proper and adequate results in return for the large sum of money which had now been paid in to the funds of the Society was the object of the Committee, and with that view Captain Brackenbury, of the Royal Artillery, was attached by the Secretary of State for War, at the request of the Society, to their service abroad.

Captain Brackenbury started on the 7th September to represent the Society and control their operations between Metz and Mezieres and the district of the Ardennes, along which line of country the great battles of the campaign were being fought. Luxembourg was found unfavourable for a chief dépôt on account of the Douane regulations which impeded the work at the Society more than can be told, and Arlon being in Belgium, where the same impediments were not cast in the way, and being also on the main line of railway communication, was wisely chosen as the chief dépôt for the stores and head-quarters of the Society. Captain Brackenbury wrote on the 6th September:—
“Already Mr. Furley has made our Society specially marked by his great exertions and the success which has attended them. It only wants that the individual efforts going on should be completely organized, for which my powers are sufficient, to let it be seen what gigantic efforts England is making to relieve the misery which, by all accounts, is almost unspeakable.”

The Archbishop of Canterbury on the 10th September addressed a letter to the Bishop of London, saying, that it seemed to him that the time had come when there ought to be a general collection in all the churches to aid one or other of the Societies for the sick and wounded. The response which followed the publication of this letter was instantaneous throughout the country. Fortunately, as it seems to us, these and other contributions were entrusted mainly to one Society, thus securing what Dr. Longmore urged five years ago in this room, viz., a system of united, and not of independent, action.

On the 17th September there were 110 persons engaged in the service of the Society. Of this number 62 were surgeons, 16 were ladies acting as nurses to the sick and wounded, and the remainder were classed under the head of agents, who were giving their services, some being paid and some unpaid.

The surgeons were employed as follows:—

At Sedan, attached to the Anglo-American ambulance, under the direction of Dr. Simms (United States) and Dr. MacCormac, with about 400 wounded French and Germans, 14 surgeons; at Balon, about 200 French and Germans, three surgeons and two ladies; at Douzy, five surgeons and one lady; at Briey, three surgeons; at Chalons, one surgeon; at Stenay, two surgeons; at Beaumont, four surgeons; at Donchéry, one surgeon and two ladies; at Bouillon, one surgeon; at Darmstadt, four surgeons; at Saarbruck, one surgeon; at Metz, two

surgeons; at Pont-à-Mousson, one surgeon; at Autrecourt, two surgeons; at Arlon, three surgeons; at Bingen (hospital under joint management of German and English), 12 surgeons; at Hanau, two surgeons; at Köln, one surgeon.

The above is an approximate statement of the distribution of the Society's surgeons, who were necessarily moving from place to place as need arises.

The agents who were working under Captain Brackenbury in the district of the Meuse and the Ardennes were 32 in number.

The above-named district having been dealt with in the manner described, a similar organization was prepared, to commence operation from Saarbruck at the first moment when the capitulation of the French Army, which was being besieged in Metz, should be brought about by the famine, disease, and sickness, which were long known to be gradually overcoming the strength and courage of the French soldiers; but before proceeding to this second stage of the Society's operation in this district I must describe what was going on in the North of France under the guidance of General Sir Vincent Eyre, whose head-quarters were at Boulogne-sur-Mer. As the tide of war did not reach this part of France till later in the campaign, it will be sufficient to state that at this period a visit of inspection was made by the General and two of his Committee to the towns of Amiens, Arras, Douai, Lille, Cambrai, Avesnes, Maubeuge, Charleville, Valenciennes, Saint Omer, and Calais, and smaller towns, the names of which I need not enumerate. Nearly every hospital and ambulance established in these places was inspected, and the most minute enquires were made from those in charge, who were requested to select from the English National Society's printed list (of which translation had been prepared in French) such articles as they particularly needed. This they accordingly did, Sir Vincent Eyre advising the Committee in London by post and telegraph of what was needed. At least fifty French ambulances, containing an aggregate of some 6,000 wounded, were thus assisted in the course of this tour by the Society's Visiting Commissioners.

At Arras Sir Vincent Eyre writes that surgical instruments were particularly wanted. There was only one set of amputating instruments in the whole town, and much unfortunate delay in the performance of the most necessary operations was the consequence. English lint was greatly coveted, as also was oil, silk, woollen socks, flannel shirts, and quinine.

It should be known that the German and French surgeons infinitely prefer English lint, and only use *charpie faite de mieux*. English surgeons all detest *charpie* and use plain clean rags instead where lint is not to be had. Surgical instruments were always asked for, and the amount sent out by the society amounted to £10,345 4s. 11d. in value. The supply of instruments abroad was soon exhausted, and could not be replaced except from England, from the fact of those engaged in making them on the Continent having become soldiers in the ranks. And to this difficulty was soon added, the closing of all communications with Paris, to which city the whole of France habitually looked, not only for medical and surgical supplies, but even for the ordinary

necessaries of life. Waterproof sheeting, and fabrics of that class, and drugs, such as chloroform, are far better in England than abroad, and hence the demand which was made upon us for this class of goods. The value of these things sent out during the campaign amounted to £8,505 7s. 10d.

A French Officer of artillery expressed his gratitude here to Sir Vincent for the services rendered him at Sedan by one of our English surgeons, who dressed his wounds and took care of him. As many thousands, both French and Germans, passed through the hands of our surgeons, it may be supposed that a feeling of gratitude to the English nation will rest in the hearts of these poor fellows for the amount of care and tenderness which they everywhere met with in English hospitals, and from English agents.

I alluded a few minutes ago to the departure from Paris, on the 28th August, of the Anglo-American Ambulance. On the 11th September, just a fortnight afterwards, Dr. MacCormac, whose recent appointment to the staff of St. Thomas's Hospital I look upon with pleasure and satisfaction, wrote as follows:—"We have witnessed the utter downfall of the Grande Armée of the Rhine, the capture of an Emperor with his 80,000 men, 300 pieces of cannon, 60 metrail-leuses, and 90,000 stand of arms." He goes on to describe how the ambulance got into position and into working order on the eve of the great battle which was fought on the 1st September. How the Caserne d'Asfeld in Sedan, with its 384 beds, was made over to him and his colleague Dr. Simms, while Dr. Frank became accidentally, or rather providentially, separated from them and established a branch hospital at Balan, where in the Mairie he placed himself and carried on operations during the battle, being compelled at times to lie flat down beside the wounded and dying to escape the shot and bullets which were coming in at the roof of the house. The work done at the Caserne d'Asfeld was as follows:—

Wounded, inscribed, and registered, including a few sick	593
Sick and wounded not registered, but moved in hospital.....	200
Wounded, dressed, and attended to, and extern patients, during the battles of the 31st August and 1st September	400
Total.....	1,193

As yet we have no precise account of the work done at Balan, where there were no less than 400 cases and many operations.

From the Caserne d'Asfeld, MacCormac writes:—"We have about 60 cases of amputation and several of resection of the upper extremities. Some of them have been done in other ambulances. Yesterday we had a number of tents pitched, capable of holding 120 beds. We have wonderfully healthy wards, but they are over-crowded. Yesterday we had a visit from the Intendant General. He was much pleased with our arrangements, excepting the open

" windows ; at that he stood aghast, protested strongly, and told us " a *courant d'air* like that which kill our patients. In the last three " days 3,500 wounded have been sent out of Sedan, but the place seems " as full as ever. Every second house has the red-cross flag flying " over its door." Dr. MacCormac gives an account of an operation which I hope I may be excused for repeating, as it shows the value of chloroform. He says, " the other day at Balan I assisted Frank " with an amputation of the thigh of a poor Chasseur, who had just " been brought in. His thigh had been badly smashed the first day of " the fighting, and he was left to lie in a ditch for five days after- " wards without succour. Neither had he tasted food all that time. " As gangrene was imminent, amputation was decided upon. The " first thing Lyon asked for, for that was his name, was a cigar, which " he smoked with great zest until he was being put under the influence " of chloroform. After the operation, and on regaining his senses, he " requested permission to finish his cigar, as he would not like to " waste it, and he might as well utilize the time until they were ready " to operate. It was difficult to persuade him all was finished. For " some days this brave young soldier went on well, but tetanus set in " and his recovery was despaired of." During this time there were grave complaints in letters from abroad of the cruelty of the rapid evacuations of the badly wounded soldiers when their condition and weakness was such as to render their transport dangerous to life. The weight of testimony, however, is abundantly on the side of rapid removal from the vicinity of battle fields. " The principle of " isolation, Dr. Murray says, " If carried out well, cannot be over- " estimated, but proper means of transport would diminish the " mortality greatly. The ordinary country carts which were used did " not afford protection from cold and wet, and did more injury by " jolting." I am tempted to give a few lines from a letter written by Mr. Furley on the 12th September. He says, " You know how " bravely and conscientiously the British Medical Profession always " do their duty. I wish, however, all the members of the National " Committee could have heard from the self-sacrificing nurses at Balan, " as I did yesterday, their testimony to the zeal, patience, and perse- " vering labours of our chief in that village, Dr. Frank. His presence " is sunshine in every room he enters, and his subordinates who so " ably and willingly support him will always, I am sure, feel proud of " having worked under him." Mr. Furley goes on to give a little history which is most touching in its character. He says, " while at " Balan yesterday, a packet was placed in the hands of one of the " surgeons. This consisted of a pocket-book, a cross of an officer of " the Legion d'Honneur, together with a note in pencil ; both the " pocket-book and the note are pierced with a bullet, but the name and " address are fortunately preserved, and the *souvenir* will, as soon as " possible, be forwarded to the widow.

" *Sedan, 1st Sept.* Au milieu de la bataille entoure par les balles je " t'adresse mes adieux. Les balles et les bullets qui m'epargnent " depuis 4 heures ne me ménagerons pas plus longtemps. Adieu. Ma " femme bien-aimée Jespère qu'une âme charitable te fera parvenir cet

"adieu. Je me suis comporté bravement et je meurs pour n'avoir pas voulu abandonner nos blessés. Adieu un baiser."

Dr. Simms, U. S., Dr. MacCormac's colleague, in his report to our Committee, gives such strong testimony to the value of women nurses that I feel bound to quote what he says:—"As nurses, I would not exchange one woman for a dozen men.

"From the moment that women were introduced as nurses, the whole aspect of our establishment was changed. Only last night a poor wounded soldier's life was saved by one of our lady nurses in a most remarkable manner. It is well known," he says, "that gun-shot wounds are often followed by secondary hæmorrhage from 10 to 20 days after the wound is received. We had great trouble in arresting a bleeding of this sort. It took two hours to do it. One of our lady nurses, Miss Neligan, stood by aiding us all the time. During the night, when all slept, Miss Neligan remembering three or four badly-wounded men in her ward, and fearing that some such accident as she had just witnessed might occur to them, went quietly round, and, gently examining them, found, to her horror, that one of her patients was lying in a pool of blood still gushing forth in a great stream. Instantly she stanchèd the blood by compression, and called up the doctor in charge, who permanently arrested the bleeding. Five minutes, and the man would have been dead, while the stupid men nurses were snoring, fast asleep."

With regard to the organization of ambulances, Dr. Simms writes as follows:—

"The *personnel* of the French ambulances were too numerous. They had an expensive retinue of infirmiers which might be dispensed with in a great degree. I would organize an ambulance as follows:—One surgeon-in-chief, two or three surgeons, dressers in proportion; three or four women nurses. I would pick up infirmiers whenever and wherever they were needed. In time of war there are idle men enough out of employment who are glad of occupation. It would be better to send out several small ambulances thus organized than one too large and unwieldy."

Drs. MacCormac and Simms thoroughly agreed upon the important subject of free ventilation and the use of disinfectants. The wide windows on the sides of the building were never closed, and the wind swept through the wards all the time from S.W. to N.E. Carbolic acid was freely used. Carbolic lotions constituted the dressings in all cases. Free ventilation and carbolic acid kept the wards sweet, notwithstanding the immense crowd of seriously wounded. No one was allowed to suffer pain if morphine hypodermically, or chlorodyne, or other form of opium could control it. No one was allowed to pass a sleepless night if chloral could procure rest.

It was a gratifying thing to pass through the wards at 10 or 11 o'clock at night and find 350 poor sufferers all quiet and sleeping soundly, and Dr. Simms adds, "What precious boons to humanity are morphine and chloral."

Towards the middle of October this stage of the Anglo-American

Ambulance came to a close by the return of Dr. MacCormac to England, Dr. Simms having preceded him by a month.

Early in October it became apparent that the fortress of Metz could no longer hold out, and rumours of the approaching capitulation of Bazaine, at the head of 100,000 men, who were being reduced by sickness and famine, caused the Society to make the most strenuous exertions to prepare an organization for that district, similar to that which had been so successfully established at Beaumont, Duazy, Balan, Bazielles, and Sedan. Hitherto the drain on the resources had been so great in dealing with the wants of this district that comparatively little had been done in the Metz neighbourhood; but Drs. Ernest Hart and Berkeley Hill had rendered valuable services by inquiring into, and reporting upon, the condition of things, and these gentlemen, though not agents of the Society, took the very greatest trouble on its behalf. Dr. Hardwick also assisted in paving the way for the arrival of Captain Brackenbury, who took up his head-quarters at Saarbruck, leaving Mr. Reginald Capel in charge of the Arlon dépôt, from which place he still continued to supply the needs which remained at and around Sedan.

On the 4th October Captain Brackenbury reported that within a few days he trusted to be in a position to say that all the sick and wounded, French and Germans, in the whole circle round Metz, would have all the comforts they required.

Metz, and a considerable district under range of its guns, was of course still unapproachable by friends or foes. A hospital for 100 beds was established at Saarbruck and placed under Drs. Junker and Rogers, also at Briey Dr. Hirschfeld was placed in charge of about 60 beds. The work of the Society was often greatly aided by various members of the order of St. John, the Johanniters, who mustered in strong force at Saarbruck. This Society has an admirable organization, framed before and during the Austrian War of 1866, and perfected by the experience derived therefrom. The members are men of rank and position in Germany, and are said to have good influence with the Government and with the military authorities.

Captain Brackenbury established most friendly relations with these Knights of St. John and with their chiefs, Count Konigsmarck and Herr von Jreskow. Dr. Sandwith, who was one of the first to offer his services to the Society, and who did good work in their behalf in this very town of Saarbruck previous to the organization under Captain Brackenbury, also speaks in high terms of the kindness shown him by Prince Hohenlohe, and by Baron Ompteda; but notwithstanding the most friendly relations which existed between the societies, it was found necessary to maintain on the part of the English Society a complete independance of action on account of a fundamental difference existing in the objects and intentions of the subscribers to the Fund. The Johanniters gave from their stores to the troops (under arms, as well as to the sick and wounded) and no doubt contributed greatly thereby to the health and fighting power of the regiments of the North German Army. This was precisely what the people of Berlin, Munich, and Dresden desired, but it was not for that object that the

English people subscribed their money and sent in their gifts to St. Martin's Place.

When Marshal Bazaine capitulated at Metz on the 27th October, the English fourgons were the first on the scene, carrying the relief which was so much needed, and returning to Remilly with wounded Officers. Captain Brackenbury reported here about this time as follows:—"I cannot tell you with what pleasure I look on our work here. The first to enter Metz—the first to give succour—the first also in liberality, our Society has here taken the true place which England's generosity entitles us to assume. No one can know the misery we relieve; no one can over-estimate the blessings which are showered upon us for our work."

The French *Société de Secours* at Metz paid our Society a great compliment; they asked Captain Brackenbury to distribute their stores for them, showing thereby the confidence they had in his impartiality and judgment.

One of the questions which gives rise to much discussion and controversy, is that which relates to dépôts and their constitution in time of war. To have the stores at hand, and the means of conveying them where they are wanted, are the necessities which all people acknowledge to be of the first importance; but owing to the vicissitudes of war, it is far from improbable that a dépôt established to-day may become useless to-morrow. Surprises and changes are essential to military operations, and anticipated arrangements are precisely those which frequently fail in their aim and object. Again, the size of dépôts is a matter about which there are different opinions and much controversy. Small dépôts scattered about are wasteful, inasmuch as the tide of war may never flow near them (the Society was urged to form dépôts in all sorts of places), while large dépôts are apt to become places where goods are buried and lost for want of classification and arrangement. Witness the stores rooms of Balaklava. The plan adopted by Captain Brackenbury was to establish principle dépôts as at Arlon and Saarbruck, with advanced dépôts at Briey and Remelley; as time went on, and the war spread, to them were added more advanced dépôts at Charleville, Chalons, Chateau, Thierry, and Meaux. This last-named place became, through the circumstances of the war, one of the most important stations at which the work of the Society was carried on. Working as the English Society did, with a resolution to add nothing to the burdens which fell upon the population of the invaded districts, it was necessary to be furnished with all things needed for the conveyance of stores, such as carts, waggons, and horses. These things had to be bought or hired at war prices, and as many as fifty waggons were employed in supplying the hospitals round Sedan alone when the wants were most urgent. As the Society's stores became known, requisitions poured in from Prussian, French, Bavarian, and Belgian ambulances, and these were invariably complied with.

By the end of September a sum of nearly £200,000 had been raised in money alone, besides contributions in goods, the value of which it is difficult to estimate. The subscribers to the Fund perceived that

the extent of the need surpassed all precedent, and was beyond the power of any ordinary means of relief. The work of the Society could not keep pace with the eager desire of people at home to see their contributions carried to the help of those armies, where the slaughter had been equally sudden and enormous. The Committee determined therefore to give £40,000 for the benefit of the sick and wounded of the French and German nations, making it a distinct and honourable obligation on the part of their Chiefs to apply the money exclusively to the purposes above stated. The Committee entrusted to me the duty of carrying this large contribution in equal portions to the Germans at Versailles, and to the French in Paris.

Without entering into a history, I may be allowed to state that, in the course of my journey in a carriage between Havre and Paris, I passed a dozen times through the outposts of the French and German armies, that I was never detained five minutes, except when passing the barricades outside the besieged city, and that the Red Cross Flag was generally saluted both by soldiers and peasants along the whole road.

I merely relate this as being, in my opinion, a remarkable instance of the working of the Geneva Convention, without which it would have been impossible for me to have made the journey through towns and villages which were being alternately occupied by German and French soldiers, and by *Francs-Tireurs*, whose discipline and organization was somewhat similar to that of the *banditti* in Greece.

The permission to enter Paris was accorded me by the King of Prussia, and I was able to carry assistance to the sick and wounded in the besieged city at a time when it was most acceptable and grateful to the French nation.

Soon after my return to England the following letter was received from His Royal Highness the Crown Prince of Prussia:—

“Head-quarters, Versailles,

“November 2nd, 1870.

“The noble contribution brought by Colonel Loyd-Lindsay, for the use of the sick and wounded, from the English Society, of which he is the director, deserves somewhat more than a simple acknowledgment.

“On this, as on other occasions of distress, the help of the English public has been poured out with a liberal and impartial hand.

“The gifts which have been offered in a truly Christian spirit, have excited a feeling of heartfelt gratitude amongst those in whose name I speak. In doing so I am repeating the feelings of the whole of my country people, in this instance represented by those for whose special benefit these gifts are destined.

(Signed)

“FREDERICK WILLIAM,

“Crown Prince.

“To Colonel Loyd-Lindsay, V.C., &c.”

It afforded a gratifying assurance to the subscribers that this kindly feeling and generous liberality were justly appreciated by those at

the head of the German Army, and indeed by the German Army itself.

During the time that I was at Versailles, viz., 11th and 12th October, very severe fighting was going on near Orleans. While at the headquarters of the Crown Prince the messenger arrived bearing the news of the defeat of the French Army of the Loire, and of the victorious entry of the Bavarians under General Von der Tann into Orleans. The Germans were subsequently driven out of Orleans, and here it was that the French obtained their only marked success which befell their arms during the whole campaign.

The battles of the 8th and 9th November resulted in the retreat of Von der Tann, and the French army, under General Aurelles de Paladines, took up its position across the Loire, at Orleans and Chateaudun. For a very brief period it looked as if the French were about to retrieve their fortunes. Their army was a larger one than that which marched under McMahon to Sedan. It had a powerful artillery, and was composed chiefly of old soldiers, who had been liberated from service, but had been recalled again to the ranks. With all this, however, we have at present no concern, save inasmuch as it relates to the sick and wounded, who, even more than usual in this campaign, were left destitute of the barest necessities for preserving life. The French surgeons had neither chloroform, nor medicines, nor surgical instruments, and many of the amputations had to be performed with butchers' knives and common saws.

The English Society was fortunate in obtaining the services of two most able and indefatigable representatives in this district of France, viz., Colonel Elphinstone, C.B., and Mr. S. S. Lee, an American gentleman living at Tours. These two gentlemen have been up to the present time, and are still, unwearied in their exertions to relieve the sufferings of the wounded soldiers. I despair of being able to record a hundredth part of all they did in the unhappy district around Tours and Orleans, where oft-recurring battles have turned into a desert the most fertile part of France.

Colonel Elphinstone and Mr. Lee were especially successful in the establishing of a railway station soup kitchen at Tours, where wounded men passed through in vast numbers, arriving every night by hundreds at the station, where they were carried in or hobbled along themselves, without arms or legs, a terrible army of martyrs. Colonel Elphinstone or Mr. Lee were at the station every evening, with hot soup, coffee, and bread. It was impossible to describe the gratitude of the men who had had nothing to eat all day, and nothing warm for many days. On looking back to the work of the Society, there is nothing more satisfactory to my mind than the records of the distribution of nourishing food and sustenance given to the exhausted suffering wounded soldiers, who were being moved in long trains of trucks and waggons, travelling day and night, exposed to the weather, and with nothing given them but a biscuit and some water to drink. The restaurant at Forbach, near Metz, which was maintained by the English Society, in conjunction with the Johanniters, supplied, during the month of October and part of November, about 19,500 sick and wounded with wine, coffee, and food.

and exchanged the rags of the poor men for warm clothing, socks, drawers, &c. The poor soldiers, especially the French, frequently fought without having tasted food, and if wounded, often remained for days, with nothing more nourishing than a piece of dry bread to eat.

Miss Elizabeth Garrett, who was at Sedan about the middle of September, on her return home, amongst other practical suggestions, mentioned this one to the English Society. Railway station kitchens were established by Captain Neville at Maux. At this last place, beside the sick and wounded, French prisoners arrived from all parts, and, after hours of agony and hunger, were sent on by trains to Germany in open trucks, and these trains were so often shunted, that they took between five and eight days to reach Nancy. The prisoners never leaving the waggon, and exposed, night and day, to whatever weather chance might send, and to hunger, reaching almost to starvation. Captain Neville received such pressing demands, that he yielded, and provided a large supply of food for these positively starving men. Again, at the battle of Querrieux, near Amiens, on the 23rd December, Colonel Cox established an extempore cooking place in the field. He says, "Our ambulance was the only one which had brought out any sort of comfort for the wounded, beyond surgical requisites, and fortunately we were able to supply every demand made upon us by the medical men." This prompt administration of food and stimulants within the first few hours after receiving a wound, and before removal to hospital, is often of more value and importance even than surgical attendance. It is a point much neglected in the Prussian service, where too much reliance appears to be placed in surgical aid alone, unsupported by the valuable help of such auxiliary comforts as it has been the special aim of our Society to supply. The experience we have acquired at the above mentioned battle of Querrieux, and elsewhere during the campaign, shows that such aid can be provided, even on the actual battle-field, with the most advantageous results, at comparatively small cost or trouble. It has been estimated that with such extra comforts 30 per cent. more of the severely wounded would survive, than if left to ordinary French and German hospital diet.

The slight sketch which I have endeavoured to give of the work done by the National Society would be even more incomplete than it is were I to omit to mention the departure from England, with some of its subsequent operations, of the Ambulance which generally went by the name of the Woolwich Ambulance, and which was fitted out under the Director-General of the Army Medical Department, aided by Dr. Longmore, professor of surgery at Netley. This officer, whose experience and knowledge of matters connected with the transport of sick and wounded troops, and whose interest in the working of the Geneva Convention has made his name known almost as much abroad as at home, was to have headed our ambulance as a medical director, but falling ill just before its departure, much to the grief of all parties concerned, he was unable to undertake the duty.

The Ambulance left Woolwich for Havre on the 14th October; its organization and equipment was complete for 200 patients, with hospital

marquees, bell-tents, bedding, and cooking apparatus. Besides these arrangements for a permanent hospital, it was equipped with all things necessary to enable it to take the field, with 8 ambulance waggons, 12 store waggons, furnished with operating cases and surgical dressing-cases, medical comforts, preserved meats, biscuits, &c. The *personnel* consisted of 12 medical officers and 27 hospital corps men, the whole being under the command of Dr. Guy, Deputy Inspector-General of Hospitals. The route chosen for the Ambulance to reach Versailles was through Havre, Rouen, Mantes, and Vernon. It reached the headquarters of the German Army, investing Paris about the last week in October.

The medical officers were allotted a building at St. Germain, where they took charge of 200 patients, who were suffering from typhus and dysentery, but owing to difficulties which arose in the course of frequent visits by the German Medical Inspectors, who perhaps naturally enough required a subserviency to their own *modus operandi* in the management of the patients, an abrupt termination was put to this form of aiding and assisting the sufferers in the war. The whole of the bedding and stores necessary for the comfort and support of the patients were made over to the German authorities, and the English medical officers withdrawn from the care and treatment of their former patients, who were immediately taken charge of by the German doctors.

The field equipment now came into operation, and the Woolwich ambulance was divided into two parts. Dr. Manley, V.C., who had become second in command, owing to Dr. Porter's illness, received on the 11th November an order to take charge of a division of the ambulance, and to proceed to Chartrel, where, in consequence of the repulse of the Bavarian Army from Orleans, it was expected that important operations would shortly take place. Dr. Manley joined the 22nd Division of the Prussian Army with the following staff: Assistant-Surgeon McNalty, and Assistant-Surgeon Moore, together with one sergeant and four men of the Army Hospital Corps, with the 22nd Division of the Prussian Army. He continued to march in a westerly direction, and on the 18th the ambulance was present at an engagement which took place at a village named Forçay; the waggons were taken forward, and the stretchers brought out, and the wounded collected. The ambulance waggons were then ordered to proceed to Chateauneuf, where an hospital had been established. It was nine at night before the ambulances were cleared of the wounded, and the following day they were again engaged in carrying in wounded, the Prussians putting their serious cases into the English waggons, as being steadier and less liable to jolt than their own. On the 20th the division moved on, and on the 21st they were again engaged near Bretoncelles, where the ambulances again did good service. On the 2nd December a general action took place at the village of Bagneux; an English hospital was formed at a farmhouse, in the village of Auneux, which was soon filled with wounded, even to the stables and outhouses. Dr. Manley caused the canteen to be prepared, and coffee and milk was served out to every man in the village before his wounds were dressed. The fight had been long and exhausting, and the cold extreme, and this treatment was

most beneficial. After this refreshment the wounded were attended to, and the more important operations proceeded with in the farmhouse kitchen. Whilst still operating at ten o'clock at night, the General commanding the division came and begged that the waggons might be again sent to the field, as there were numerous wounded not yet brought in. His request was immediately complied with, and it was not till three in the morning that all the wounded were brought back. At daylight coffee, and soup made from extract of meat, were again served out, port wine and brandy being also given when needed. For some days after this the English ambulance was working in the surrounding villages, where as many as a thousand wounded men were congregated. Surgeon Manley calls attention to a great defect in the German medical service, to which I have already alluded, viz., that no arrangements are made for giving nourishment to the wounded, either on the field of battle, or immediately after they are brought in. In his opinion this ought to rank in importance before the dressing of wounds. The work during all this period was most severe, and Surgeon Manley gives great credit to all there, both Officers and men, who worked under him. The message which he received on one occasion from General Von Wittisch shows that the services rendered by his ambulance were thankfully received and appreciated by the Prussian Commanders. "Receive," said the General, "our heartfelt thanks for your most valuable aid, given to us in the moment of our great need, when our own ambulances were not forthcoming."

A second division of the English ambulance, under the command of Dr. Guy, proceeded on the 1st of December, under orders of the Prince of Hesse, to Beaune-la-Rolande, where they took under their charge the whole of the French wounded, who were scattered throughout the town. Besides this work his waggons were continually employed in transporting wounded French and Prussians.

A third division, under Dr. Ball, was placed in charge of the wounded who had been left at Pithiviers, about 14 miles from Beaune-la-Rolande, and subsequently was installed in charge of a large ambulance, in the old chateau at Blois.

The three divisions of the English ambulance were supplied with stores from the dépôt of the National Society at Versailles, which was under the management of Mr. Young, Commissary-General to the Ambulance, and of Mr. John Furley, who has been from the commencement an active agent of the Society abroad, and who is now engaged under the French Peasant Farmers Seed Fund Committee in relieving the wants of the farmers round Paris.

On the first statement of the sufferings of the French prisoners of war in Germany, the Society sent out Lieutenant Swaine, of the Rifle Brigade, to act as their agent in the districts where prisoners of war are confined. Lieutenant Swaine carried with him warm clothing, to the amount of £6,000, which he has distributed in the most methodical manner at Magdeburg, Cologne, and other places. His letters to the Committee bear testimony to the good treatment which the prisoners of war receive from the Germans. He states that at the places he has visited, the men all agree that they are as well off as they have a right

to expect; and he himself adds that never were prisoners so well treated. The Committee could add more evidence to the same effect.

With a similar object and furnished with similar stores, the Society sent Captain Harvey, of the 71st Highland Light Infantry, to visit the German prisoners in France. At Belle Isle the greatest number of prisoners were confined; of these a large proportion were merchant seamen, whose hard fate it was impossible not to feel pity for. Many had been captured in August, and had lost their ships and all their property, and a great many first learnt the news of the war having been declared by being taken prisoners.

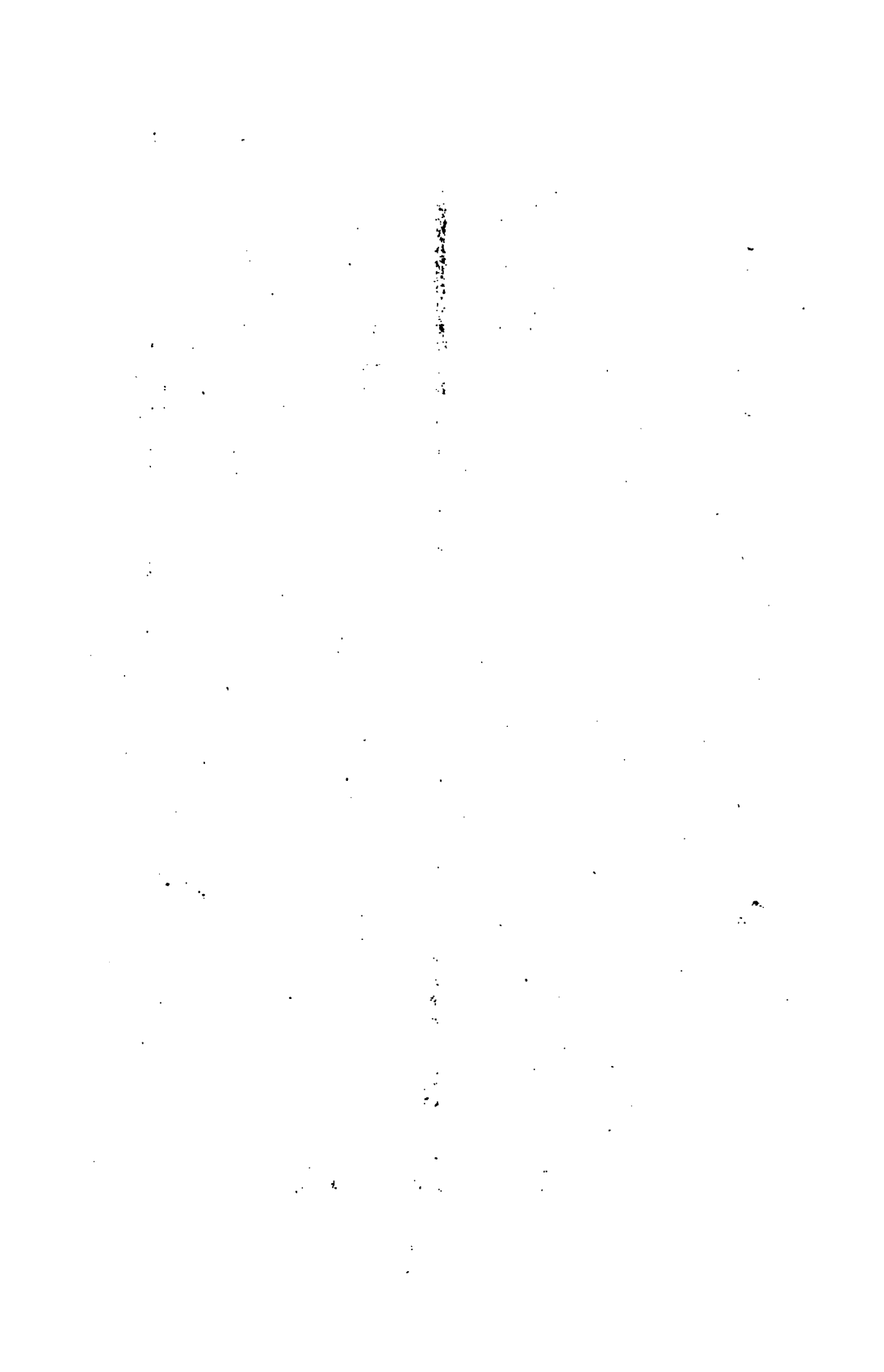
In the course of the lecture which I have been allowed to deliver, and to which you have been kind enough to listen, I have endeavoured to show, in the form of a narrative, the mode in which aid has been given to "the sick and wounded in war." I chose this form in which to treat the subject which I have been asked to lecture upon, because I thought that people would be more likely to be interested, and perhaps instructed, in the subject before us, by hearing of that which actually has occurred, rather than by listening to a lecture built up upon theoretical speculations. Now in the narrative which I have very imperfectly given, and which in no way pretends to be complete as a report of the work of the Society, there have been questions touched upon from time to time which are of both interest and importance. The manner in which these questions have been dealt with and solved under practical circumstances, I venture to think is worthy to be placed on permanent record. Casting my eyes back over the pages I have read, I find that the following subjects have been more or less touched upon. The Geneva Convention has been shown to have worked beneficially; and indeed without it much could not possibly have been done which has been under its protection accomplished. The articles have been sometimes abused, and the terms of the Convention not always adhered to. Soldiers and civilians who were not very actively engaged in the service of the sick and wounded have sometimes used the badge very freely, and the belligerents have not shown proper strictness in requiring the production of the badge or brassards. To avoid this inconvenience every accredited member of the Society should have a card, properly printed in the language of the belligerents, bearing the name and rank (in the Society) of the owner. This card should be properly stamped with a device or words which should be recognized and acknowledged by the authorities of the contending forces, and copies of this, should be lodged with the chiefs of the Society, who should also receive a nominal roll of all members sent out in the service of the sick and wounded. When a society of a neutral nation desires to come to the assistance of an army in the field, it should in the first instance send out a chief agent with precise instructions as to the character of aid which the neutral contemplates being able to furnish. This assistance must, of course, consist either in providing surgical aid, or in providing stores such as food, surgical instruments, drugs, warm clothing, &c. In the late war both these forms of assistance were given, and both were welcome. The first, I should say, was most in accordance with the subscribers' intentions; the second was certainly the most

he has made, and by the information which he can give. On such matters as the best mode of collecting the wounded off the field of battle, and on the most convenient form of ambulance waggons and stretchers, he has given me some interesting details. He says that the vehicle which he thinks best adapted for the transportation of stores is one made after the model of the Prussian commissariat waggon. The advantage being that when fully loaded, it can be drawn by two horses, that it has a permanent roof which can be locked, and so the stores which it contains are rendered safe from loss when left unguarded or unprotected.

On the value of giving food and sustenance, he gave the best evidence by what he and his colleagues did at the battle near Bagneux, and since he has come home he has said that a good, prompt, and efficient system for supplying stimulants and nourishment to sick and wounded in time of war is of as great importance as proper surgical treatment. The lack of these requirements appeared to him the one blot on the otherwise most efficient medical service of the Germans. The following is a short account which Dr. Manley has kindly given me, from his own observation, of what takes place in the German Army for the transportation of the wounded from the field to the waggons, from the waggons to the field hospitals, and from thence to the hospitals in the rear. The regimental surgeons accompany their regiments into battle, and to every 250 men there are three *Kranken Tragers*, who accompany the regiment into action, and are supplied with and know how to use the necessary field dressings. This has proved to be a most judicious regulation, for of all the arrangements of the Prussian medical service, that of the corps of *Kranken Tragers* is the most perfect, and ought to be adopted in our service. The way in which these men do their work and the rapidity with which they remove the wounded from the field, is most commendable and worthy of imitation. Immediately after an engagement, the *Sanitats* detachment, which includes a staff of medical officers, the *Kranken Tragers*, and the ambulance waggons, all under the command of a *Rittmeister*, who is generally a Captain in the service, and who has a Lieutenant to assist him, is ordered to advance on to the field by the surgeon of the division under whose command the whole is placed. The stretchers are got out, and the *Kranken Tragers* advance, two men to each stretcher, taking a certain direction and a certain line under the command of the *Rittmeister* and his Lieutenant, accompanied by some of the Medical Officers of the detachment to collect the wounded as fast as possible and bring them to the place where the waggons have been halted. The Surgeons who have remained with the waggons proceed to apply the primary dressings and get the wounded into the waggons. When the waggons are full they are immediately dispatched at a slow and steady walk to the nearest house or place which has been designated as a temporary hospital, and over which the Geneva flag is immediately hoisted. The ambulance waggons are unloaded as quickly as possible and dispatched again to the field at a rapid pace, when all the wounded that can be found have been taken off the field, the line of *Kranken*

Tragers is ordered to halt. The mounted Officers and Non-Commissioned Officers advance and search along the ditches and hedges, and at intervals shout to attract the attention of any wounded men who may have fallen out of sight, listening also to hear if there is any response. When the wounded arrive at the temporary field hospitals they are laid side by side. The surgeons immediately proceed to dress the wounds, and tie to the button of every man's coat a small white card, on which is written a short description of the wound. If the *corps d'armée* has to advance the next day, the Sanitäts detachment accompanies it, and the wounded are taken over by the field Lazarettes of the division which is left in charge. Such are the provisions for the care and the removal of the wounded from the field to the field hospital, and from the field hospital to the more permanent hospital in the rear in the German Army—the most systematizing army in the world. In our own Army, since the Crimean war, an Army Hospital Corps has been formed, or rather it has received a new constitution. I believe it numbers about 1,000 men in its ranks, a proportion of these are trained in the duties of carrying and tending the wounded in the field itself and in the hospital subsequently, but, as far as I am aware, no regimental system is provided by which wounded men are collected after a battle and carried to where surgical aid can be given them. Perhaps the Germans may be said to systematize to too great an extent, even down to the most minute matters, but it is difficult to hold this opinion in the face of the wonderful success which has everywhere attended their military operations.

In conclusion, I would beg my kind hearers to understand that what I have read to them in no way pretends to be a report of the work done by the Society abroad. My account is obviously incomplete in all matters connected with finance and precise statement of goods and money supplied to the French and German wounded soldiers. It is merely a narrative of some of the events of the war, in which the National Society took some part and some share not altogether unworthy of the English people, who, in the words of the Crown Prince, already quoted, "have poured out their help with a liberal and "impartial hand." Can we doubt that the same hand would be stretched out as liberally in aid of our own armies, and in aid of those injured in the nation's cause, should we unfortunately be drawn into the calamity of war, and can we wisely or justly decline to do what other nations have done, viz., to appoint National Committees, recognized by Government; whose functions it would be to organize the distribution of the national donations on a sound and proper footing, and thus be prepared to supplement what all admit must greatly need expansion and extension, viz., the medical department of an army in time of war.



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THE BATTLE OF DORKING: REMINISCENCES OF A VOLUNTEER.

You ask me to tell you, my grandchildren, something about my own share in the great events that happened fifty years ago. 'Tis sad work turning back to that bitter page in our history, but you may perhaps take profit in your new homes from the lesson it teaches. For us in England it came too late. And yet we had plenty of warnings, if we had only made use of them. The danger did not come on us un-awares. It burst on us suddenly, 'tis true, but its coming was foreshadowed plainly enough to open our eyes, if we had not been wilfully blind. We English have only ourselves to blame for the humiliation which has been brought on the land. Venerable old age! Dishonourable old age, I say, when it follows a manhood dishonoured as ours has been. I declare, even now, though fifty years have passed, I can hardly look a young man in the face when I think I am one of those in whose youth happened this degradation of Old England—one of those who betrayed the trust handed

down to us unstained by our forefathers.

What a proud and happy country was this fifty years ago! Free-trade had been working for more than a quarter of a century, and there seemed to be no end to the riches it was bringing us. London was growing bigger and bigger; you could not build houses fast enough for the rich people who wanted to live in them, the merchants who made the money and came from all parts of the world to settle there, and the lawyers and doctors and engineers and others, and tradespeople who got their share out of the profits. The streets reached down to Croydon and Wimbledon, which my father could remember quite country places; and people used to say that Kingston and Reigate would soon be joined to London. We thought we could go on building and multiplying for ever. 'Tis true that even then there was no lack of poverty; the people who had no money went on increasing as fast as the rich, and pauperism

was already beginning to be a difficulty ; but if the rates were high, there was plenty of money to pay them with ; and as for what were called the middle classes, there really seemed no limit to their increase and prosperity. People in those days thought it quite a matter of course to bring a dozen of children into the world—or, as it used to be said, Providence sent them that number of babies ; and if they couldn't always marry off all the daughters, they used to manage to provide for the sons, for there were new openings to be found in all the professions, or in the Government offices, which went on steadily getting larger. Besides, in those days young men could be sent out to India, or into the army or navy ; and even then emigration was not uncommon, although not the regular custom it is now. Schoolmasters, like all other professional classes, drove a capital trade. They did not teach very much, to be sure, but new schools with their four or five hundred boys were springing up all over the country.

Fools that we were ! We thought that all this wealth and prosperity were sent us by Providence, and could not stop coming. In our blindness we did not see that we were merely a big workshop, making up the things which came from all parts of the world ; and that if other nations stopped sending us raw goods to work up, we could not produce them ourselves. True, we had in those days an advantage in our cheap coal and iron ; and had we taken care not to waste the fuel, it might have lasted us longer. But even then there were signs that coal and iron would soon become cheaper in other parts ; while as to food and other things, England was not better off than it is now. We were so rich simply because other *nations from all parts of the world*

were in the habit of sending their goods to us to be sold or manufactured ; and we thought that this would last for ever. And so, perhaps, it might have lasted, if we had only taken proper means to keep it ; but, in our folly, we were too careless even to insure our prosperity, and after the course of trade was turned away it would not come back again.

And yet, if ever a nation had a plain warning, we had. If we were the greatest trading country, our neighbours were the leading military power in Europe. They were driving a good trade, too, for this was before their foolish communism (about which you will hear when you are older) had ruined the rich without benefiting the poor, and they were in many respects the first nation in Europe ; but it was on their army that they prided themselves most. And with reason. They had beaten the Russians and the Austrians, and the Prussians too, in bygone years, and they thought they were invincible. Well do I remember the great review held at Paris by the Emperor Napoleon during the great Exhibition, and how proud he looked showing off his splendid Guards to the assembled kings and princes. Yet, three years afterwards, the force so long deemed the first in Europe was ignominiously beaten, and the whole army taken prisoners. Such a defeat had never happened before in the world's history ; and with this proof before us of the folly of disbelieving in the possibility of disaster merely because it had never happened before, it might have been supposed that we should have the sense to take the lesson to heart. And the country was certainly roused for a time, and a cry was raised that the army ought to be reorganised, and our defences strengthened against the enormous power for sudden attacks which it

was seen other nations were able to put forth. But our Government had come into office on a cry of retrenchment, and could not bring themselves to eat their own pledges. There was a Radical section of their party, too, whose votes had to be secured by conciliation, and which blindly demanded a reduction of armaments as the price of allegiance. This party always decried military establishments as part of a fixed policy for reducing the influence of the Crown and the aristocracy. They could not understand that the times had altogether changed, that the Crown had really no power, and that the Government merely existed at the pleasure of the House of Commons, and that even Parliament-rule was beginning to give way to mob-law. At any rate, the Ministry were only too glad of this excuse to give up all the strong points of a scheme which they were not really in earnest about. The fleet and the Channel, they said, were sufficient protection. So the army was kept down, and the militia and volunteers were left untrained as before, because to call them out for drill would "interfere with the industry of the country." We could have given up some of the industry of those days, forsooth, and yet be busier than we are now. But why tell you a tale you have so often heard already? The nation, although uneasy, was misled by the false security its leaders professed to feel; the warning given by the disasters that overtook France was allowed to pass by unheeded. The French trusted in their army and its great reputation, we in our fleet; and in each case the result of this blind confidence was disaster, such as our forefathers in their hardest struggles could not have even imagined.

I need hardly tell you how the crash came about. First, the rising

in India drew away a part of our small army; then came the difficulty with America, which had been threatening for years, and we sent off ten thousand men to defend Canada—a handful which did not go far to strengthen the real defences of that country, but formed an irresistible temptation to the Americans to try and take them prisoners, especially as the contingent included three battalions of the Guards. Thus the regular army at home was even smaller than usual, and nearly half of it was in Ireland to check the talked-of Fenian invasion fitting out in the West. Worse still—though I do not know it would really have mattered as things turned out—the fleet was scattered abroad: some ships to guard the West Indies, others to check privateering in the China seas, and a large part to try and protect our colonies on the Northern Pacific shore of America, where, with incredible folly, we continued to retain possessions which we could not possibly defend. America was not the great power forty years ago that it is now; but for us to try and hold territory on her shores which could only be reached by sailing round the Horn, was as absurd as if she had attempted to take the Isle of Man before the independence of Ireland. We see this plainly enough now, but we were all blind then.

It was while we were in this state, with our ships all over the world, and our little bit of an army cut up into detachments, that the Secret Treaty was published, and Holland and Denmark were annexed. People say now that we might have escaped the troubles which came on us if we had at any rate kept quiet till our other difficulties were settled; but the English were always an impulsive lot: the whole country was boiling over with indignation, and the Govern-

ment, egged on by the press, and going with the stream, declared war. We had always got out of scrapes before, and we believed our old luck and pluck would somehow pull us through.

Then, of course, there was bustle and hurry all over the land. Not that the calling up of the army reserves caused much stir, for I think there were only about 5000 altogether, and a good many of these were not to be found when the time came; but recruiting was going on all over the country, with a tremendous high bounty, 50,000 more men having been voted for the army. Then there was a Ballot Bill passed for adding 55,000 men to the militia; why a round number was not fixed on I don't know, but the Prime Minister said that this was the exact quota wanted to put the defences of the country on a sound footing. Then the shipbuilding that began! Ironclads, despatch-boats, gunboats, monitors,—every building-yard in the country got its job, and they were offering ten shillings a-day wages for anybody who could drive a rivet. This didn't improve the recruiting, you may suppose. I remember, too, there was a squabble in the House of Commons about whether artisans should be drawn for the ballot, as they were so much wanted, and I think they got an exemption. This sent numbers to the yards; and if we had had a couple of years to prepare instead of a couple of weeks, I daresay we should have done very well.

It was on a Monday that the declaration of war was announced, and in a few hours we got our first inkling of the sort of preparation the enemy had made for the event which they had really brought about, although the actual declaration was made by us. A pious appeal to the God of battles, whom it was said we *had aroused, was telegraphed back;*

and from that moment all communication with the north of Europe was cut off. Our embassies and legations were packed off at an hour's notice, and it was as if we had suddenly come back to the middle ages. The dumb astonishment visible all over London the next morning, when the papers came out void of news, merely hinting at what had happened, was one of the most startling things in this war of surprises. But everything had been arranged beforehand; nor ought we to have been surprised, for we had seen the same Power, only a few months before, move down half a million of men on a few days' notice, to conquer the greatest military nation in Europe, with no more fuss than our War Office used to make over the transport of a brigade from Aldershot to Brighton,—and this, too, without the allies it had now. What happened now was not a bit more wonderful in reality; but people of this country could not bring themselves to believe that what had never occurred before to England could ever possibly happen. Like our neighbours, we became wise when it was too late.

Of course the papers were not long in getting news—even the mighty organisation set at work could not shut out a special correspondent; and in a very few days, although the telegraphs and railways were intercepted right across Europe, the main facts oozed out. An embargo had been laid on all the shipping in every port from the Baltic to Ostend; the fleets of the two great Powers had moved out, and it was supposed were assembled in the great northern harbour, and troops were hurrying on board all the steamers detained in these places, most of which were British vessels. It was clear that invasion was intended. Even then we might have been

saved, if the fleet had been ready. The forts which guarded the flotilla were perhaps too strong for shipping to attempt; but an ironclad or two, handled as British sailors knew how to use them, might have destroyed or damaged a part of the transports, and delayed the expedition, giving us what we wanted, time. But then the best part of the fleet had been decoyed down to the Dardanelles, and what remained of the Channel squadron was looking after Fenian filibusters off the west of Ireland; so it was ten days before the fleet was got together, and by that time it was plain the enemy's preparations were too far advanced to be stopped by a *coup-de-main*. Information, which came chiefly through Italy, came slowly, and was more or less vague and uncertain; but this much was known, that at least a couple of hundred thousand men were embarked or ready to be put on board ships, and that the flotilla was guarded by more ironclads than we could then muster. I suppose it was the uncertainty as to the point the enemy would aim at for landing, and the fear lest he should give us the go-by, that kept the fleet for several days in the Downs; but it was not until the Tuesday fortnight after the declaration of war that it weighed anchor and steamed away for the North Sea. Of course you have read about the Queen's visit to the fleet the day before, and how she sailed round the ships in her yacht, and went on board the flag-ship to take leave of the admiral; how, overcome with emotion, she told him that the safety of the country was committed to his keeping. You remember, too, the gallant old officer's reply, and how all the ships' yards were manned, and how lustily the tars cheered as her Majesty was rowed off. The account was of course telegraphed to London, and the high spirits of the fleet in-

fectured the whole town. I was outside the Charing Cross station when the Queen's special train from Dover arrived, and from the cheering and shouting which greeted her as she drove away, you might have supposed we had already won a great victory. The journals which had gone in strongly for the army reduction carried out during the session, and had been nervous and desponding in tone during the past fortnight, suggesting all sorts of compromises as a way of getting out of the war, came out in a very jubilant form next morning. "Panic-stricken inquirers," they said, "ask now, where are the means of meeting the invasion? We reply that the invasion will never take place. A British fleet, manned by British sailors whose courage and enthusiasm are reflected in the people of this country, is already on the way to meet the presumptuous foe. The issue of a contest between British ships and those of any other country, under anything like equal odds, can never be doubtful. England awaits with calm confidence the issue of the impending action."

Such were the words of the leading article, and so we all felt. It was on Tuesday, the 10th of August, that the fleet sailed from the Downs. It took with it a submarine cable to lay down as it advanced, so that continuous communication was kept up, and the papers were publishing special editions every few minutes with the latest news. This was the first time such a thing had been done, and the feat was accepted as a good omen. Whether it is true that the Admiralty made use of the cable to keep on sending contradictory orders, which took the command out of the admiral's hands, I can't say; but all that the admiral sent in return was a few messages of the briefest kind, which neither the Admiralty nor any one else could have

made any use of. Such a ship had gone off reconnoitring; such another had rejoined—fleet was in latitude so and so. This went on till the Thursday morning. I had just come up to town by train as usual, and was walking to my office, when the newsboys began to cry, “New edition—enemy’s fleet in sight!” You may imagine the scene in London! Business still went on at the banks, for bills matured although the independence of the country was being fought out under our own eyes, so to say; and the speculators were active enough. But even with the people who were making and losing their fortunes, the interest in the fleet overcame everything else; men who went to pay in or draw out their money stopped to show the last bulletin to the cashier. As for the street, you could hardly get along for the crowd stopping to buy and read the papers; while at every house or office the members sat restlessly in the common room, as if to keep together for company, sending out some one of their number every few minutes to get the latest edition. At least this is what happened at our office; but to sit still was as impossible as to do anything, and most of us went out and wandered about among the crowd, under a sort of feeling that the news was got quicker at in this way. Bad as were the times coming, I think the sickening suspense of that day, and the shock which followed, was almost the worst that we underwent. It was about ten o’clock that the first telegram came; an hour later the wire announced that the admiral had signalled to form line of battle, and shortly afterwards that the order was given to bear down on the enemy and engage. At twelve came the announcement, “Fleet opened fire about three miles to leeward of us”—*that is, the ship with the cable.*

So far all had been expectancy, then came the first token of calamity. “An ironclad has been blown up”—“the enemy’s torpedoes are doing great damage”—“the flagship is laid aboard the enemy”—“the flagship appears to be sinking”—“the vice-admiral has signalled”—there the cable became silent, and, as you know, we heard no more till two days afterwards. The solitary ironclad which escaped the disaster steamed into Portsmouth.

Then the whole story came out—how our sailors, gallant as ever, had tried to close with the enemy; how the latter evaded the conflict at close quarters, and, sheering off, left behind them the fatal engines which sent our ships, one after the other, to the bottom; how all this happened almost in a few minutes. The Government, it appears, had received warnings of this invention; but to the nation this stunning blow was utterly unexpected. That Thursday I had to go home early for regimental drill, but it was impossible to remain doing nothing, so when that was over I went up to town again, and after waiting in expectation of news which never came, and missing the midnight train, I walked home. It was a hot sultry night, and I did not arrive till near sunrise. The whole town was quite still—the lull before the storm; and as I let myself in with my latch-key, and went softly up-stairs to my room to avoid waking the sleeping household, I could not but contrast the peacefulness of the morning—no sound breaking the silence but the singing of the birds in the garden—with the passionate remorse and indignation that would break out with the day. Perhaps the inmates of the rooms were as wakeful as myself; but the house in its stillness was just as it used to be when I came home alone from balls or parties in

the happy days gone by. Tired though I was, I could not sleep, so I went down to the river and had a swim; and on returning found the household was assembling for early breakfast. A sorrowful household it was, although the burden pressing on each was partly an unseen one. My father, doubting whether his firm could last through the day; my mother, her distress about my brother, now with his regiment on the coast, already exceeding that which she felt for the public misfortune, had come down, although hardly fit to leave her room. My sister Clara was worst of all, for she could not but try to disguise her special interest in the fleet; and though we had all guessed that her heart was given to the young lieutenant in the flagship—the first to go down—a love unclaimed could not be told, nor could we express the sympathy we felt for the poor girl. That breakfast, the last meal we ever had together, was soon ended, and my father and I went up to town by an early train, and got there just as the fatal announcement of the loss of the fleet was telegraphed from Portsmouth.

The panic and excitement of that day—how the funds went down to 35; the run upon the bank and its stoppage; the fall of half the houses in the city; how the Government issued a notification suspending specie payment and the tendering of bills—this last precaution too late for most firms, Carter & Co. among the number, which stopped payment as soon as my father got to the office; the call to arms, and the unanimous response of the country—all this is history which I need not repeat. You wish to hear about my own share in the business of the time. Well, volunteering had increased immensely from the day war was proclaimed, and our regiment went up in a day or two

from its usual strength of 600 to nearly 1000. But the stock of rifles was deficient. We were promised a further supply in a few days, which, however, we never received; and while waiting for them the regiment had to be divided into two parts, the recruits drilling with the rifles in the morning, and we old hands in the evening. The failures and stoppage of work on this black Friday threw an immense number of young men out of employment, and we recruited up to 1400 strong by the next day; but what was the use of all these men without arms? On the Saturday it was announced that a lot of smooth-bore muskets in store at the Tower would be served out to regiments applying for them, and a regular scramble took place among the volunteers for them, and our people got hold of a couple of hundred. But you might almost as well have tried to learn rifle-drill with a broom-stick as with old brown bess; besides, there was no smooth-bore ammunition in the country. A national subscription was opened for the manufacture of rifles at Birmingham, which ran up to a couple of millions in two days, but, like everything else, this came too late. To return to the volunteers: camps had been formed a fortnight before at Dover, Brighton, Harwich, and other places, of regulars and militia, and the headquarters of most of the volunteer regiments were attached to one or other of them, and the volunteers themselves used to go down for drill from day to day, as they could spare time, and on Friday an order went out that they should be permanently embodied; but the metropolitan volunteers were still kept about London as a sort of reserve, till it could be seen at what point the invasion would take place. We were all told off to brigades and divisions. Our brigade consisted of the 4th

Royal Surrey Militia, the 1st Surrey Administrative Battalion, as it was called, at Clapham, the 7th Surrey Volunteers at Southwark, and ourselves; but only our battalion and the militia were quartered in the same place, and the whole brigade had merely two or three afternoons together at brigade exercise in Bushey Park before the march took place. Our brigadier belonged to a line regiment in Ireland, and did not join till the very morning the order came. Meanwhile, during the preliminary fortnight, the militia colonel commanded. But though we volunteers were busy with our drill and preparations, those of us who, like myself, belonged to Government offices, had more than enough of office work to do, as you may suppose. The volunteer clerks were allowed to leave office at four o'clock, but the rest were kept hard at the desk far into the night. Orders to the lord-lieutenants, to the magistrates, notifications, all the arrangements for cleaning out the work-houses for hospitals—these and a hundred other things had to be managed in our office, and there was as much bustle in-doors as out. Fortunate we were to be so busy—the people to be pitied were those who had nothing to do. And on Sunday (that was the 15th August) work went on just as usual. We had an early parade and drill, and I went up to town by the nine o'clock train in my uniform, taking my rifle with me in case of accidents, and luckily too, as it turned out, a mackintosh overcoat. When I got to Waterloo there were all sorts of rumours afloat. A fleet had been seen off the Downs, and some of the despatch-boats which were hovering about the coasts brought news that there was a large flotilla off Harwich, but nothing could be seen from the shore, *as the weather was hazy. The enemy's light ships had taken and*

sunk all the fishing-boats they could catch, to prevent the news of their whereabouts reaching us, but a few escaped during the night and reported that the Inconstant frigate coming home from North America, without any knowledge of what had taken place, had sailed right into the enemy's fleet and been captured. In town the troops were all getting ready for a move; the Guards in the Wellington Barracks were under arms, and their baggage-waggons packed and drawn up in the Bird-cage Walk. The usual guard at the Horse Guards had been withdrawn, and orderlies and staff-officers were going to and fro. All this I saw on the way to my office, where I worked away till twelve o'clock, and then feeling hungry after my early breakfast, I went across Parliament Street to my club to get some luncheon. There were about half-a-dozen men in the coffee-room, none of whom I knew; but in a minute or two Danvers of the Treasury entered in a tremendous hurry. From him I got the first bit of authentic news I had had that day. The enemy had landed in force near Harwich, and the metropolitan regiments were ordered down there to reinforce the troops already collected in that neighbourhood; his regiment was to parade at one o'clock, and he had come to get something to eat before starting. We bolted a hurried lunch, and were just leaving the club when a messenger from the Treasury came running into the hall.

"Oh, Mr Danvers," said he, "I've come to look for you, sir; the secretary says that all the gentlemen are wanted at the office, and that you must please not one of you go with the regiments."

"The devil!" cried Danvers.

"Do you know if that order extends to all the public offices?" I asked.

"I don't know," said the man, "but I believe it do. I know there's messengers gone round to all the clubs and luncheon-bars to look for the gentlemen; the secretary says it's quite impossible any one can be spared just now, there's so much work to do; there's orders just come to send off our records to Birmingham to-night."

I did not wait to condole with Danvers, but, just glancing up Whitehall to see if any of our messengers were in pursuit, I ran off as hard as I could for Westminster Bridge, and so to the Waterloo station.

The place had quite changed its aspect since the morning. The regular service of trains had ceased, and the station and approaches were full of troops, among them the Guards and artillery. Everything was very orderly; the men had piled arms, and were standing about in groups. There was no sign of high spirits or enthusiasm. Matters had become too serious. Every man's face reflected the general feeling that we had neglected the warnings given us, and that now the danger so long derided as impossible and absurd had really come and found us unprepared. But the soldiers, if grave, looked determined, like men who meant to do their duty whatever might happen. A train full of guardsmen was just starting for Guildford. I was told it would stop at Surbiton, and, with several other volunteers, hurrying like myself to join our regiment, got a place in it. We did not arrive a moment too soon, for the regiment was marching from Kingston down to the station. The destination of our brigade was the east coast. Empty carriages were drawn up in the siding, and our regiment was to go first. A large crowd was assembled to see it off, including the recruits who had joined during the

last fortnight, and who formed by far the largest part of our strength. They were to stay behind, and were certainly very much in the way already; for as all the officers and sergeants belonged to the active part, there was no one to keep discipline among them, and they came crowding around us, breaking the ranks and making it difficult to get into the train. Here I saw our new brigadier for the first time. He was a soldier-like man, and no doubt knew his duty, but he appeared new to volunteers, and did not seem to know how to deal with gentlemen privates. I wanted very much to run home and get my great-coat and knapsack, which I had bought a few days ago, but feared to be left behind; a good-natured recruit volunteered to fetch them for me, but he had not returned before we started, and I began the campaign with a kit consisting of a mackintosh and a small pouch of tobacco.

It was a tremendous squeeze in the train; for, besides the ten men sitting down, there were three or four standing up in every compartment, and the afternoon was close and sultry, and there were so many stoppages on the way that we took nearly an hour and a half crawling up to Waterloo. It was between five and six in the afternoon when we arrived there, and it was nearly seven before we marched up to the Shoreditch station. The whole place was filled up with stores and ammunition, to be sent off to the East, so we piled arms in the street and scattered about to get food and drink, of which most of us stood in need, especially the latter, for some were already feeling the worse for the heat and crush. I was just stepping into a public-house with Travers, when who should drive up but his pretty wife? Most of our friends had paid their adieus at the Surbiton sta-

tion, but she had driven up by the road in his brougham, bringing their little boy to have a last look at papa. She had also brought his knapsack and greatcoat, and, what was still more acceptable, a basket containing fowls, tongue, bread-and-butter, and biscuits, and a couple of bottles of claret,—which priceless luxuries they insisted on my sharing.

Meanwhile the hours went on. The 4th Surrey Militia, which had marched all the way from Kingston, had come up, as well as the other volunteer corps ; the station had been partly cleared of the stores that encumbered it ; some artillery, two militia regiments, and a battalion of the line, had been despatched, and our turn to start had come, and long lines of carriages were drawn up ready for us ; but still we remained in the street. You may fancy the scene. There seemed to be as many people as ever in London, and we could hardly move for the crowds of spectators—fellows hawking fruits and volunteers' comforts, newsboys, and so forth, to say nothing of the cabs and omnibuses ; while orderlies and staff-officers were constantly riding up with messages. A good many of the militiamen, and some of our people, too, had taken more than enough to drink ; perhaps a hot sun had told on empty stomachs ; anyhow, they became very noisy. The din, dirt, and heat were indescribable. So the evening wore on, and all the information our officers could get from the brigadier, who appeared to be acting under another general, was, that orders had come to stand fast for the present. Gradually the street became quieter and cooler. The brigadier, who, by way of setting an *example*, had remained for some *hours without leaving his saddle, had got a chair out of a shop, and*

sat nodding in it ; most of the men were lying down or sitting on the pavement—some sleeping, some smoking. In vain had Travers begged his wife to go home. She declared that, having come so far, she would stay and see the last of us. The brougham had been sent away to a by-street, as it blocked up the road ; so he sat on a doorstep, she by him on the knapsack. Little Arthur, who had been delighted at the bustle and the uniforms, and in high spirits, became at last very cross, and eventually cried himself to sleep in his father's arms, his golden hair and one little dimpled arm hanging over his shoulder. Thus went on the weary hours, till suddenly the assembly sounded, and we all started up. We were to return to Waterloo. The landing on the east was only a feint—so ran the rumour—the real attack was on the south. Anything seemed better than indecision and delay, and, tired though we were, the march back was gladly hailed. Mrs Travers, who made us take the remains of the luncheon with us, we left to look for her carriage ; little Arthur, who was awake again, but very good and quiet, in her arms.

We did not reach Waterloo till nearly midnight, and there was some delay in starting again. Several volunteer and militia regiments had arrived from the north ; the station and all its approaches were jammed up with men, and trains were being despatched away as fast as they could be made up. All this time no news had reached us since the first announcement ; but the excitement then aroused had now passed away under the influence of fatigue and want of sleep, and most of us dozed off as soon as we got under way. I did, at any rate, and was awoke by the train stopping at Leatherhead. There was an up-train returning to town,

and some persons in it were bringing up news from the coast. We could not, from our part of the train, hear what they said, but the rumour was passed up from one carriage to another. The enemy had landed in force at Worthing. Their position had been attacked by the troops from the camp near Brighton, and the action would be renewed in the morning. The volunteers had behaved very well. This was all the information we could get. So, then, the invasion had come at last. It was clear, at any rate, from what was said, that the enemy had not been driven back yet, and we should be in time most likely to take a share in the defence. It was sunrise when the train crawled into Dorking, for there had been numerous stoppages on the way; and here it was pulled up for a long time, and we were told to get out and stretch ourselves—an order gladly responded to, for we had been very closely packed all night. Most of us, too, took the opportunity to make an early breakfast off the food we had brought from Shoreditch. I had the remains of Mrs Travers's fowl and some bread wrapped up in my waterproof, which I shared with one or two less provident comrades. We could see from our halting-place that the line was blocked with trains beyond and behind. It must have been about eight o'clock when we got orders to take our seats again, and the train began to move slowly on towards Horsham. Horsham Junction was the point to be occupied—so the rumour went; but about ten o'clock, when halting at a small station a few miles short of it, the order came to leave the train, and our brigade formed in column on the highroad. Beyond us was some field-artillery; and further on, so we were told by a staff-officer, another brigade, which was to make up a division with ours. After more delays the line began to move,

but not forwards; our route was towards the north-west, and a sort of suspicion of the state of affairs flashed across my mind. Horsham was already occupied by the enemy's advanced-guard, and we were to fall back on Leith Common, and take up a position threatening his flank, should he advance either to Guildford or Dorking. This was soon confirmed by what the colonel was told by the brigadier and passed down the ranks; and just now, for the first time, the boom of artillery came up on the light south breeze. In about an hour the firing ceased. What did it mean? We could not tell. Meanwhile our march continued. The day was very close and sultry, and the clouds of dust stirred up by our feet almost suffocated us. I had saved a soda-water-bottleful of yesterday's claret; but this went only a short way, for there were many mouths to share it with, and the thirst soon became as bad as ever. Several of the regiment fell out from faintness, and we made frequent halts to rest and let the stragglers come up. At last we reached the top of Leith Hill. It is a striking spot, being the highest point in the south of England. The view from it is splendid, and most lovely did the country look this summer day, although the grass was brown from the long drought. It was a great relief to get from the dusty road on to the common, and at the top of the hill there was a refreshing breeze. We could see now, for the first time, the whole of our division. Our own regiment did not muster more than 500, for it contained a large number of Government office men who had been detained, like Danvers, for duty in town, and others were not much larger; but the militia regiment was very strong, and the whole division, I was told, mustered nearly 5000 rank and file. We could see other

troops also in extension of our division, and could count a couple of field-batteries of Royal Artillery, besides some heavy guns, belonging to the volunteers apparently, drawn by cart-horses. The cooler air, the sense of numbers, and the evident strength of the position we held, raised our spirits, which, I am not ashamed to say, had all the morning been depressed. It was not that we were not eager to close with the enemy, but that the counter-marching and halting ominously betokened a vacillation of purpose in those who had the guidance of affairs. Here in two days the invaders had got more than twenty miles inland, and nothing effectual had been done to stop them. And the ignorance in which we volunteers, from the colonel downwards, were kept of their movements, filled us with uneasiness. We could not but depict to ourselves the enemy as carrying out all the while firmly his well-considered scheme of attack, and contrasting it with our own uncertainty of purpose. The very silence with which his advance appeared to be conducted filled us with mysterious awe. Meanwhile the day wore on, and we became faint with hunger, for we had eaten nothing since daybreak. No provisions came up, and there were no signs of any commissariat officers. It seems that when we were at the Waterloo station a whole trainful of provisions was drawn up there, and our colonel proposed that one of the trucks should be taken off and attached to our train, so that we might have some food at hand; but the officer in charge, an assistant-controller I think they called him—this control department was a newfangled affair which did us almost as much harm as the enemy in the long-run—said his orders were to keep all the stores *together, and that he couldn't issue any without authority from the head*

of his department. So we had to go without. Those who had tobacco smoked—indeed there is no solace like a pipe under such circumstances. The militia regiment, I heard afterwards, had two days' provisions in their haversacks; it was we volunteers who had no haversacks, and nothing to put in them. All this time, I should tell you, while we were lying on the grass with our arms piled, the General, with the brigadiers and staff, was riding about slowly from point to point of the edge of the common, looking out with his glass towards the south valley. Orderlies and staff-officers were constantly coming, and about three o'clock there arrived up a road that led towards Horsham a small body of lancers and a regiment of yeomanry, who had, it appears, been out in advance, and now drew up a short way in front of us in column facing to the south. Whether they could see anything in their front I could not tell, for we were behind the crest of the hill ourselves, and so could not look into the valley below; but shortly afterwards the assembly sounded. Commanding officers were called out by the General, and received some brief instructions; and the column began to march again towards London, the militia this time coming last in our brigade. A rumour regarding the object of this counter-march soon spread through the ranks. The enemy was not going to attack us here, but was trying to turn the position on both sides, one column pointing to Reigate, the other to Aldershot; and so we must fall back and take up a position at Dorking. The line of the great chalk-range was to be defended. A large force was concentrating at Guildford, another at Reigate, and we should find supports at Dorking. The enemy would be awaited in these positions. Such, so far as we privates could get

at the facts, was to be the plan of operations. Down the hill, therefore, we marched. From one or two points we could catch a brief sight of the railway in the valley below running from Dorking to Horsham. Men in red were working upon it here and there. They were the Royal Engineers, some one said, breaking up the line. On we marched. The dust seemed worse than ever. In one village through which we passed—I forget the name now—there was a pump on the green. Here we stopped and had a good drink; and passing by a large farm, the farmer's wife and two or three of her maids stood at the gate and handed us hunches of bread and cheese out of some baskets. I got the share of a bit, but the bottom of the baskets must soon have been reached. Not a thing else was to be had till we got to Dorking about six o'clock; indeed most of the farmhouses appeared deserted already. On arriving there we were drawn up in the street, and just opposite was a baker's shop. Our fellows asked leave at first by twos and threes to go in and buy some loaves, but soon others began to break off and crowd into the shop, and at last a regular scramble took place. If there had been any order preserved, and a regular distribution arranged, they would no doubt have been steady enough, but hunger makes men selfish: each man felt that his stopping behind would do no good—he would simply lose his share; so it ended by almost the whole regiment joining in the scrimmage, and the shop was cleared out in a couple of minutes; while as for paying, you could not get your hand into your pocket for the crush. The colonel tried in vain to stop the row; some of the officers were as bad as the men. Just then a staff-officer rode by; he could scarcely make way for the

crowd, and was pushed against rather rudely, and in a passion he called out to us to behave properly, like soldiers, and not like a parcel of roughs. "Oh, blow it, governor," says Dick Wake, "you arn't agoing to come between a poor cove and his grub." Wake was an articulated attorney, and, as we used to say in those days, a cheeky young chap, although a good-natured fellow enough. At this speech, which was followed by some more remarks of the sort from those about him, the staff-officer became angrier still. "Orderly," cried he to the lancer riding behind him, "take that man to the provost-marshal. As for you, sir," he said, turning to our colonel, who sat on his horse silent with astonishment, "if you don't want some of your men shot before their time, you and your precious officers had better keep this rabble in a little better order;" and poor Dick, who looked crest-fallen enough, would certainly have been led off at the tail of the sergeant's horse, if the brigadier had not come up and arranged matters, and marched us off to the hill beyond the town. This incident made us both angry and crest-fallen. We were annoyed at being so roughly spoken to: at the same time we felt we had deserved it, and were ashamed of the misconduct. Then, too, we had lost confidence in our colonel, after the poor figure he cut in the affair. He was a good fellow, the colonel, and showed himself a brave one next day; but he aimed too much at being popular, and didn't understand a bit how to command.

To resume:—We had scarcely reached the hill above the town, which we were told was to be our bivouac for the night, when the welcome news came that a food-train had arrived at the station; but there were no carts to bring the things up, so a fatigue-party went down and carried back a supply to us in

their arms,—loaves, a barrel of rum, packets of tea, and joints of meat—abundance for all ; but there was not a kettle or a cooking-pot in the regiment, and we could not eat the meat raw. The colonel and officers were no better off. They had arranged to have a regular mess, with crockery, steward, and all complete, but the establishment never turned up, and what had become of it no one knew. Some of us were sent back into the town to see what we could procure in the way of cooking utensils. We found the street full of artillery, baggage-waggon, and mounted officers, and volunteers shopping like ourselves ; and all the houses appeared to be occupied by troops. We succeeded in getting a few kettles and saucepans, and I obtained for myself a leather bag, with a strap to go over the shoulder, which proved very handy afterwards ; and thus laden, we trudged back to our camp on the hill, filling the kettles with dirty water from a little stream which runs between the hill and the town, for there was none to be had above. It was nearly a couple of miles each way ; and, exhausted as we were with marching and want of rest, we were almost too tired to eat. The cooking was of the roughest, as you may suppose ; all we could do was to cut off slices of the meat and boil them in the saucepans, using our fingers for forks. The tea, however, was very refreshing ; and, thirsty as we were, we drank it by the gallon. Just before it grew dark, the brigade-major came round, and, with the adjutant, showed our colonel how to set a picket in advance of our line a little way down the face of the hill. It was not necessary to place one, I suppose, because the town in our front was still occupied with troops ; but no doubt the practice would be *useful*. We had also a quarter-

guard, and a line of sentries in front and rear of our line, communicating with those of the regiments on our flanks. Firewood was plentiful, for the hill was covered with beautiful wood ; but it took some time to collect it, for we had nothing but our pocket-knives to cut down the branches with.

So we lay down to sleep. My company had no duty, and we had the night undisturbed to ourselves ; but, tired though I was, the excitement and the novelty of the situation made sleep difficult. And although the night was still and warm, and we were sheltered by the woods, I soon found it chilly with no better covering than my thin dust-coat, the more so as my clothes, saturated with perspiration during the day, had never dried ; and before daylight I woke from a short nap, shivering with cold, and was glad to get warm with others by a fire. I then noticed that the opposite hills on the south were dotted with fires ; and we thought at first they must belong to the enemy, but we were told that the ground up there was still held by a strong rear-guard of regulars, and that there need be no fear of a surprise.

At the first sign of dawn the bugles of the regiments sounded the *reveillé*, and we were ordered to fall in, and the roll was called. About twenty men were absent, who had fallen out sick the day before ; they had been sent up to London by train during the night, I believe. After standing in column for about half an hour, the brigade-major came down with orders to pile arms and stand easy ; and perhaps half an hour afterwards we were told to get breakfast as quickly as possible, and to cook a day's food at the same time. This operation was managed pretty much in the same way as the evening before, except that we had our cooking pots and kettles ready,

Meantime there was leisure to look around, and from where we stood there was a commanding view of one of the most beautiful scenes in England. Our regiment was drawn up on the extremity of the ridge which runs from Guildford to Dorking. This is indeed merely a part of the great chalk-range which extends from beyond Aldershot east to the Medway; but there is a gap in the ridge just here where the little stream that runs past Dorking turns suddenly to the north, to find its way to the Thames. We stood on the slope of the hill, as it trends down eastward towards this gap, and had passed our bivouac in what appeared to be a gentleman's park. A little way above us, and to our right, was a very fine country-seat to which the park was attached, now occupied by the headquarters of our division. From this house the hill sloped steeply down southward to the valley below, which runs nearly east and west parallel to the ridge, and carries the railway and the road from Guildford to Reigate, and in which valley, immediately in front of the chateau, and perhaps a mile and a half distant from it, was the little town of Dorking, nestled in the trees, and rising up the foot of the slopes on the other side of the valley which stretched away to Leith Common, the scene of yesterday's march. Thus the main part of the town of Dorking was on our right front, but the suburbs stretched away eastward nearly to our proper front, culminating in a small railway station, from which the grassy slopes of the park rose up dotted with shrubs and trees to where we were standing. Round this railway station was a cluster of villas and one or two mills, of whose gardens we thus had a bird's-eye view, their little ornamental ponds glistening like looking-glasses in the morning sun. Im-

mediately on our left the park sloped steeply down to the gap before mentioned, through which ran the little stream, as well as the railway from Epsom to Brighton, nearly due north and south, meeting the Guildford and Reigate line at right angles. Close to the point of intersection and the little station already mentioned, was the station of the former line where we had stopped the day before. Beyond the gap on the east (our left), and in continuation of our ridge, rose the chalk-hill again. The shoulder of this ridge overlooking the gap is called Box Hill, from the shrubbery of box-wood with which it was covered. Its sides were very steep, and the top of the ridge was covered with troops. The natural strength of our position was manifested at a glance; a high grassy ridge steep to the south, with a stream in front, and but little cover up the sides. It seemed made for a battle-field. The weak point was the gap; the ground at the junction of the railways and the roads immediately at the entrance of the gap formed a little valley, dotted, as I have said, with buildings and gardens. This, in one sense, was the key of the position; for although it would not be tenable while we held the ridge commanding it, the enemy by carrying this point and advancing through the gap would cut our line in two. But you must not suppose I scanned the ground thus critically at the time. Anybody, indeed, might have been struck with the natural advantages of our position; but what, as I remember, most impressed me, was the peaceful beauty of the scene—the little town with the outline of the houses obscured by a blue mist, the massive crispness of the foliage, the outlines of the great trees, lighted up by the sun, and relieved by deep blue shade. So thick was the timber here, rising up the southern slopes

of the valley, that it looked almost as if it might have been a primeval forest. The quiet of the scene was the more impressive because contrasted in the mind with the scenes we expected to follow ; and I can remember, as if it were yesterday, the sensation of bitter regret that it should now be too late to avert this coming desecration of our country, which might so easily have been prevented. A little firmness, a little prevision on the part of our rulers, even a little common-sense, and this great calamity would have been rendered utterly impossible. Too late, alas ! We were like the foolish virgins in the parable.

But you must not suppose the scene immediately around was gloomy : the camp was brisk and bustling enough. We had got over the stress of weariness ; our stomachs were full ; we felt a natural enthusiasm at the prospect of having so soon to take a part as the real defenders of the country, and we were inspired at the sight of the large force that was now assembled. Along the slopes which trended off to the rear of our ridge, troops came marching up—volunteers, militia, cavalry, and guns ; these, I heard, had come down from the north as far as Leatherhead the night before, and had marched over at daybreak. Long trains, too, began to arrive by the rail through the gap, one after the other, containing militia and volunteers, who moved up to the ridge to the right and left, and took up their position, massed for the most part on the slopes which ran up from, and in rear of, where we stood. We now formed part of an army corps, we were told, consisting of three divisions, but what regiments composed the other two divisions I never heard. All this movement we could distinctly see from our position, for we had hurried over our

breakfast, expecting every minute that the battle would begin, and now stood or sat about on the ground near our piled arms. Early in the morning, too, we saw a very long train come along the valley from the direction of Guildford, full of redcoats. It halted at the little station at our feet, and the troops alighted. We could soon make out their bear-skins. They were the Guards, coming to reinforce this part of the line. Leaving a detachment of skirmishers to hold the line of the railway embankment, the main body marched up with a springy step and with the band playing, and drew up across the gap on our left, in prolongation of our line. There appeared to be three battalions of them, for they formed up in that number of columns at short intervals.

Shortly after this I was sent over to Box Hill with a message from our colonel to the colonel of a volunteer regiment stationed there, to know whether an ambulance-cart was obtainable, as it was reported this regiment was well supplied with carriage, whereas we were without any : my mission, however, was futile. Crossing the valley, I found a scene of great confusion at the railway station. Trains were still coming in with stores, ammunition, guns, and appliances of all sorts, which were being unloaded as fast as possible ; but there were scarcely any means of getting the things off. There were plenty of waggons of all sorts, but hardly any horses to draw them, and the whole place was blocked up ; while, to add to the confusion, a regular exodus had taken place of the people from the town, who had been warned that it was likely to be the scene of fighting. Ladies and women of all sorts and ages, and children, some with bundles, some empty-handed, were seeking places in the train, but

there appeared no one on the spot authorised to grant them, and these poor creatures were pushing their way up and down, vainly asking for information and permission to get away. In the crowd I observed our surgeon, who likewise was in search of an ambulance of some sort: his whole professional apparatus, he said, consisted of a case of instruments. Also in the crowd I stumbled upon Wood, Travers's old coachman. He had been sent down by his mistress to Guildford, because it was supposed our regiment had gone there, riding the horse, and laden with a supply of things—food, blankets, and, of course, a letter. He had also brought my knapsack; but at Guildford the horse was pressed for artillery work, and a receipt for it given him in exchange, so he had been obliged to leave all the heavy packages there, including my knapsack; but the faithful old man had brought on as many things as he could carry, and hearing that we should be found in this part, had walked over thus laden from Guildford. He said that place was crowded with troops, and that the heights were lined with them the whole way between the two towns; also, that some trains with wounded had passed up from the coast in the night, through Guildford. I led him off to where our regiment was, relieving the old man from part of the load he was staggering under. The food sent was not now so much needed, but the plates, knives, &c., and drinking-vessels, promised to be handy—and Travers, you may be sure, was delighted to get his letter; while a couple of newspapers the old man had brought were eagerly competed for by all, even at this critical moment, for we had heard no authentic news since we left London on Sunday. And even at this distance of time, although I only glanced down the paper, I can

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remember almost the very words I read there. They were both copies of the same paper: the first, published on Sunday evening, when the news had arrived of the successful landing at three points, was written in a tone of despair. The country must confess that it had been taken by surprise. The conqueror would be satisfied with the humiliation inflicted by a peace dictated on our own shores; it was the clear duty of the Government to accept the best terms obtainable, and to avoid further bloodshed and disaster, and avert the fall of our tottering mercantile credit. The next morning's issue was in quite a different tone. Apparently the enemy had received a check, for we were here exhorted to resistance. An impregnable position was to be taken up along the Downs, a force was concentrating there far outnumbering the rash invaders, who, with an invincible line before them, and the sea behind, had no choice between destruction or surrender. Let there be no pusillanimous talk of negotiation, the fight must be fought out; and there could be but one issue. England, expectant but calm, awaited with confidence the result of the attack on its unconquerable volunteers. The writing appeared to me eloquent, but rather inconsistent. The same paper said the Government had sent off 500 workmen from Woolwich, to open a branch arsenal at Birmingham.

All this time we had nothing to do, except to change our position, which we did every few minutes, now moving up the hill farther to our right, now taking ground lower down to our left, as one order after another was brought down the line; but the staff-officers were galloping about perpetually with orders, while the rumble of the artillery as they moved about from one part of the field to another went on almost in-

cessantly. At last the whole line stood to arms, the bands struck up, and the general commanding our army corps came riding down with his staff. We had seen him several times before, as we had been moving frequently about the position during the morning ; but he now made a sort of formal inspection. He was a tall thin man, with long light hair, very well mounted, and as he sat his horse with an erect seat, and came prancing down the line, at a little distance he looked as if he might be five-and-twenty ; but I believe he had served more than fifty years, and had been made a peer for services performed when quite an old man. I remember that he had more decorations than there was room for on the breast of his coat, and wore them suspended like a necklace round his neck. Like all the other generals, he was dressed in blue, with a cocked-hat and feathers—a bad plan, I thought, for it made them very conspicuous. The general halted before our battalion, and after looking at us a while, made a short address : We had a post of honour next her Majesty's Guards, and would show ourselves worthy of it, and of the name of Englishmen. It did not need, he said, to be a general to see the strength of our position ; it was impregnable, if properly held. Let us wait till the enemy was well pounded, and then the word would be given to go at him. Above everything, we must be steady. He then shook hands with our colonel, we gave him a cheer, and he rode on to where the Guards were drawn up.

Now then, we thought, the battle will begin. But still there were no signs of the enemy ; and the air, though hot and sultry, began to be very hazy, so that you could scarcely see the town below, and the hills *opposite were merely a confused blur, in which no features could be*

distinctly made out. After a while, the tension of feeling which followed the general's address relaxed, and we began to feel less as if everything depended on keeping our rifles firmly grasped : we were told to pile arms again, and got leave to go down by tens and twenties to the stream below to drink. This stream, and all the hedges and banks on our side of it, were held by our skirmishers, but the town had been abandoned. The position appeared an excellent one, except that the enemy, when they came, would have almost better cover than our men. While I was down at the brook, a column emerged from the town, making for our position. We thought for a moment it was the enemy, and you could not make out the colour of the uniforms for the dust ; but it turned out to be our rear-guard, falling back from the opposite hills which they had occupied the previous night. One battalion of rifles halted for a few minutes at the stream to let the men drink, and I had a minute's talk with a couple of the officers. They had formed part of the force which had attacked the enemy on their first landing. They had it all their own way, they said, at first, and could have beaten the enemy back easily if they had been properly supported ; but the whole thing was mismanaged. The volunteers came on very pluckily, they said, but they got into confusion, and so did the militia, and the attack failed with serious loss. It was the wounded of this force which had passed through Guildford in the night. The officers asked us eagerly about the arrangements for the battle, and when we said that the Guards were the only regular troops in this part of the field, shook their heads ominously.

While we were talking a third officer came up ; he was a dark man

with a smooth face and a curious excited manner. "You are volunteers, I suppose," he said, quickly, his eye flashing the while. "Well, now, look here; mind I don't want to hurt your feelings, or to say anything unpleasant, but I'll tell you what; if all you gentlemen were just to go back, and leave us to fight it out alone, it would be a devilish good thing. We could do it a precious deal better without you, I assure you. We don't want your help, I can tell you. We would much rather be left alone, I assure you. Mind I don't want to say anything rude, but that's a fact." Having blurted out this passionately, he strode away before any one could reply, or the other officers could stop him. They apologised for his rudeness, saying that his brother, also in the regiment, had been killed on Sunday, and that this, and the sun, and marching, had affected his head. The officers told us that the enemy's advanced-guard was close behind, but that he had apparently been waiting for reinforcements, and would probably not attack in force until noon. It was, however, nearly three o'clock before the battle began. We had almost worn out the feeling of expectancy. For twelve hours had we been waiting for the coming struggle, till at last it seemed almost as if the invasion were but a bad dream, and the enemy, as yet unseen by us, had no real existence. So far things had not been very different, but for the numbers and for what we had been told, from a Volunteer review on Brighton Downs. I remember that these thoughts were passing through my mind as we lay down in groups on the grass, some smoking, some nibbling at their bread, some even asleep, when the listless state we had fallen into was suddenly disturbed by a gunshot fired from the top of the hill on

our right, close by the big house. It was the first time I had ever heard a shotted gun fired, and although it is fifty years ago, the angry whistle of the shot as it left the gun is in my ears now. The sound was soon to become common enough. We all jumped up at the report, and fell in almost without the word being given, grasping our rifles tightly, and the leading files peering forward to look for the approaching enemy. This gun was apparently the signal to begin, for now our batteries opened fire all along the line. What they were firing at I could not see, and I am sure the gunners could not see much themselves. I have told you what a haze had come over the air since the morning, and now the smoke from the guns settled like a pall over the hill, and soon we could see little but the men in our ranks, and the outline of some gunners in the battery drawn up next us on the slope on our right. This firing went on, I should think, for nearly a couple of hours, and still there was no reply. We could see the gunners—it was a troop of horse-artillery—working away like fury, ramming, loading, and running up with cartridges, the officer in command riding slowly up and down just behind his guns, and peering out with his field-glass into the mist. Once or twice they ceased firing to let their smoke clear away, but this did not do much good. For nearly two hours did this go on, and not a shot came in reply. If a battle is like this, said Dick Wake, who was my next-hand file, it's mild work, to say the least. The words were hardly uttered when a rattle of musketry was heard in front; our skirmishers were at it, and very soon the bullets began to sing over our heads, and some struck the ground at our feet. Up to this time we had been in column; we were now deployed into line on the ground

signed to us. From the valley or gap on our left there ran a lane right up the hill almost due west, or along our front. This lane had a thick bank about four feet high, and the greater part of the regiment was drawn up behind it; but a little way up the hill the lane trended back out of the line, so the right of the regiment here left it and occupied the open grass-land of the park. The bank had been cut away at this point to admit of our going in and out. We had been told in the morning to cut down the bushes on the top of the bank, so as to make the space clear for firing over, but we had no tools to work with; however, a party of sappers had come down and finished the job. My company was on the right, and was thus beyond the shelter of the friendly bank. On our right again was the battery of artillery already mentioned; then came a battalion of the line, then more guns, then a great mass of militia and volunteers and a few line up to the big house. At least this was the order before the firing began; after that I do not know what changes took place.

And now the enemy's artillery began to open; where their guns were posted we could not see, but we began to hear the rush of the shells over our heads, and the bang as they burst just beyond. And now what took place I can really hardly tell you. Sometimes when I try and recall the scene, it seems as if it lasted for only a few minutes; yet I know, as we lay on the ground, I thought the hours would never pass away, as we watched the gunners still plying their task, firing at the invisible enemy, never stopping for a moment except when now and again a dull blow would be heard and a man fall down, then three or four of his comrades would *carry him to the rear*. The captain *no longer rode up and down*; what

had become of him I do not know. Two of the guns ceased firing for a time; they had got injured in some way, and up rode an artillery general. I think I see him now, a very handsome man, with straight features and a dark moustache, his breast covered with medals. He appeared in a great rage at the guns stopping fire.

"Who commands this battery?" he cried.

"I do, Sir Henry," said an officer, riding forward, whom I had not noticed before.

The group is before me at this moment, standing out clear against the background of smoke, Sir Henry erect on his splendid charger, his flashing eye, his left arm pointing towards the enemy to enforce something he was going to say, the young officer reining in his horse just beside him, and saluting with his right hand raised to his bushy. This for a moment, then a dull thud, and both horses and riders are prostrate on the ground. A round shot had struck all four at the saddle line. Some of the gunners ran up to help, but neither officer could have lived many minutes. This was not the first I saw killed. Some time before this, almost immediately on the enemy's artillery opening, as we were lying, I heard something like the sound of steel striking steel, and at the same moment Dick Wake, who was next me in the ranks, leaning on his elbows, sank forward on his face. I looked round and saw what had happened; a shot fired at a high elevation, passing over his head, had struck the ground behind, nearly cutting his thigh off. It must have been the ball striking his sheathed bayonet which made the noise. Three of us carried the poor fellow to the rear, with difficulty for the shattered limb; but he was nearly dead from loss of blood when we got to the

doctor, who was waiting in a sheltered hollow about two hundred yards in rear, with two other doctors in plain clothes, who had come up to help. We deposited our burden and returned to the front. Poor Wake was sensible when we left him, but apparently too shaken by the shock to be able to speak. Wood was there helping the doctors. I paid more visits to the rear of the same sort before the evening was over.

All this time we were lying there to be fired at without returning a shot, for our skirmishers were holding the line of walls and enclosures below. However, the bank protected most of us, and the brigadier now ordered our right company, which was in the open, to get behind it also; and there we lay about four deep, the shells crashing and bullets whistling over our heads, but hardly a man being touched. Our colonel was, indeed, the only one exposed, for he rode up and down the lane at a foot-pace as steady as a rock; but he made the major and adjutant dismount, and take shelter behind the hedge, holding their horses. We were all pleased to see him so cool, and it restored our confidence in him, which had been shaken yesterday.

The time seemed interminable while we lay thus inactive. We could not, of course, help peering over the bank to try and see what was going on; but there was nothing to be made out, for now a tremendous thunderstorm, which had been gathering all day, burst on us, and a torrent of almost blinding rain came down, which obscured the view even more than the smoke, while the crashing of the thunder and the glare of the lightning could be heard and seen even above the roar and flashing of the artillery. Once the mist lifted, and I saw for a minute an attack on Box Hill, on

the other side of the gap on our left. It was like the scene at a theatre — a curtain of smoke all round and a clear gap in the centre, with a sudden gleam of evening sunshine lighting it up. The steep smooth slope of the hill was crowded with the dark-blue figures of the enemy, whom I now saw for the first time—an irregular outline in front, but very solid in rear: the whole body was moving forward by fits and starts, the men firing and advancing, the officers waving their swords, the columns closing up and gradually making way. Our people were almost concealed by the bushes at the top, whence the smoke and their fire could be seen proceeding: presently from these bushes on the crest came out a red line, and dashed down the brow of the hill, a flame of fire belching out from the front as it advanced. The enemy hesitated, gave way, and finally ran back in a confused crowd down the hill. Then the mist covered the scene, but the glimpse of this splendid charge was inspiring, and I hoped we should show the same coolness when it came to our turn. It was about this time that our skirmishers fell back, a good many wounded, some limping along by themselves, others helped. The main body retired in very fair order, halting to turn round and fire; we could see a mounted officer of the Guards riding up and down encouraging them to be steady. Now came our turn. For a few minutes we saw nothing, but a rattle of bullets came through the rain and mist, mostly, however, passing over the bank. We began to fire in reply, stepping up against the bank to fire, and stooping down to load; but our brigade-major rode up with an order, and the word was passed through the men to reserve our fire. In a very few moments it must have been that, when ordered to stand, we

could see the helmet-spikes and then the figures of the skirmishers as they came on : a lot of them there appeared to be, five or six deep I should say, but in loose order, each man stopping to aim and fire, and then coming forward a little. Just then the brigadier clattered on horseback up the lane. "Now, then, gentlemen, give it them hot," he cried ; and fire away we did, as fast as ever we were able. A perfect storm of bullets seemed to be flying about us too, and I thought each moment must be the last ; escape seemed impossible, but I saw no one fall, for I was too busy, and so were we all, to look to the right or left, but loaded and fired as fast as I could. How long this went on I know not—it could not have been long ; neither side could have lasted many minutes under such a fire, but it ended by the enemy gradually falling back, and as soon as we saw this we raised a tremendous shout, and some of us jumped up on the bank to give them our parting shots. Suddenly the order was passed down the line to cease firing, and we soon discovered the cause ; a battalion of the Guards was charging obliquely across from our left across our front. It was, I expect, their flank attack as much as our fire which had turned back the enemy ; and it was a splendid sight to see their steady line as they advanced slowly across the smooth lawn below us, firing as they went, but as steady as if on parade. We felt a great elation at this moment ; it seemed as if the battle was won. Just then somebody called out to look to the wounded, and for the first time I turned to glance down the rank along the lane. Then I saw that we had not beaten back the attack without loss. Immediately before me lay Lawford of my office, dead on his back from *a bullet through his forehead, his hand still grasping his rifle.* At

every step was some friend or acquaintance killed or wounded, and a few paces down the lane I found Travers, sitting with his back against the bank. A ball had gone through his lungs, and blood was coming from his mouth. I was lifting him, but the cry of agony he gave stopped me. I then saw that this was not his only wound ; his thigh was smashed by a bullet (which must have hit him when standing on the bank), and the blood streaming down mixed in a muddy puddle with the rain-water under him. Still he could not be left here, so, lifting him up as well as I could, I carried him through the gate which led out of the lane at the back to where our camp hospital was in the rear. The movement must have caused him awful agony, for I could not support the broken thigh, and he could not restrain his groans, brave fellow though he was ; but how I carried him at all I cannot make out, for he was a much bigger man than myself ; but I had not gone far, one of a stream of our fellows, all on the same errand, when a bandsman and Wood met me, bringing a hurdle as a stretcher, and on this we placed him. Wood had just time to tell me that he had got a cart down in the hollow, and would endeavour to take off his master at once to Kingston, when a staff-officer rode up to call us to the ranks. "You really must not straggle in this way, gentlemen," he said ; "pray keep your ranks." "But we can't leave our wounded to be trodden down and die," cried one of our fellows. "Beat off the enemy first, sir," he replied. "Gentlemen, do, pray, join your regiments, or we shall be a regular mob." And no doubt he did not speak too soon ; for besides our fellows straggling to the rear, lots of volunteers from the regiments in reserve were running forward to help,

till the whole ground was dotted with groups of men. I hastened back to my post, but I had just time to notice that all the ground in our rear was occupied by a thick mass of troops, much more numerous than in the morning, and a column was moving down to the left of our line, to the ground now held by the Guards. All this time, although the musketry had slackened, the artillery fire seemed heavier than ever; the shells screamed overhead or burst around; and I confess to feeling quite a relief at getting back to the friendly shelter of the lane. Looking over the bank, I noticed for the first time the frightful execution our fire had created. The space in front was thickly strewn with dead and badly wounded, and beyond the bodies of the fallen enemy could just be seen—for it was now getting dusk—the bearskins and red coats of our own gallant Guards scattered over the slope, and marking the line of their victorious advance. But hardly a minute could have passed in thus looking over the field, when our brigade-major came moving up the lane on foot (I suppose his horse had been shot), crying, "Stand to your arms, Volunteers! they're coming on again;" and we found ourselves a second time engaged in a hot musketry fire. How long it went on I cannot now remember, but we could distinguish clearly the thick line of skirmishers, about sixty paces off, and mounted officers among them; and we seemed to be keeping them well in check, for they were quite exposed to our fire, while we were protected nearly up to our shoulders, when—I know not how—I became sensible that something had gone wrong. "We are taken in flank!" called out some one; and looking along the left, sure enough there were dark figures jumping over the bank into the lane and fir-

ing up along our line. The volunteers in reserve, who had come down to take the place of the Guards, must have given way at this point; the enemy's skirmishers had got through our line, and turned our left flank. How the next move came about I cannot recollect, or whether it was without orders, but in a short time we found ourselves out of the lane and drawn up in a straggling line about thirty yards in rear of it—at our end, that is, the other flank had fallen back a good deal more—and the enemy were lining the hedge, and numbers of them passing over and forming up on our side. Beyond our left a confused mass were retreating, firing as they went, followed by the advancing line of the enemy. We stood in this way for a short space, firing at random as fast as we could. Our colonel and major must have been shot, for there was no one to give an order, when somebody on horseback called out from behind—I think it must have been the brigadier—"Now, then, Volunteers! give a British cheer, and go at them—charge!" and, with a shout, we rushed at the enemy. Some of them ran, some stopped to meet us, and for a moment it was a real hand-to-hand fight. I felt a sharp sting in my leg, as I drove my bayonet right through the man in front of me. I confess I shut my eyes, for I just got a glimpse of the poor wretch as he fell back, his eyes starting out of his head, and, savage though we were, the sight was almost too horrible to look at. But the struggle was over in a second, and we had cleared the ground again right up to the rear hedge of the lane. Had we gone on, I believe we might have recovered the lane too, but we were now all out of order; there was no one to say what to do; the enemy began to line the hedge and open

fire, and they were streaming past our left ; and how it came about I know not, but we found ourselves falling back towards our right rear, scarce any semblance of a line remaining, and the volunteers who had given way on our left mixed up with us, and adding to the confusion. It was now nearly dark. On the slopes which we were retreating to was a large mass of reserves drawn up in columns. Some of the leading files of these, mistaking us for the enemy, began firing at us ; our fellows, crying out to them to stop, ran towards their ranks, and in a few moments the whole slope of the hill became a scene of confusion that I cannot attempt to describe, regiments and detachments mixed up in hopeless disorder. Most of us, I believe, turned towards the enemy and fired away our few remaining cartridges ; but it was too late to take aim, fortunately for us, or the guns which the enemy had brought up through the gap, and were firing point-blank, would have done more damage. As it was, we could see little more than the bright flashes of their fire. In our confusion we had jammed up a line regiment immediately behind us, and its colonel and some staff-officers were in vain trying to make a passage for it, and their shouts to us to march to the rear and clear a road could be heard above the roar of the guns and the confused babel of sound. At last a mounted officer pushed his way through, followed by a company in sections, the men brushing past with firm-set faces, as if on a desperate task ; and the battalion, when it got clear, appeared to deploy and advance down the slope. I have also a dim recollection of seeing the Life Guards trot past the front, and push *on towards the town—a last desperate attempt to save the day—*

before we left the field. Our adjutant, who had got separated from our flank of the regiment in the confusion, now came up, and managed to lead us, or at any rate some of us, up to the crest of the hill in the rear, to re-form, as he said ; but there we met a vast crowd of volunteers, militia, and waggons, all hurrying rearward from the direction of the big house, and we were borne in the stream for a mile at least before it was possible to stop. At last the adjutant led us to an open space a little off the line of fugitives, and there we re-formed the remains of the companies. Telling us to halt, he rode off to try and obtain orders, and find out where the rest of our brigade was. From this point, a spur of high ground running off from the main plateau, we looked down through the dim twilight into the battle-field below. Artillery fire was still going on. We could see the flashes from the guns on both sides, and now and then a stray shell came screaming up and burst near us, but we were beyond the sound of musketry. This halt first gave us time to think about what had happened. The long day of expectancy had been succeeded by the excitement of battle ; and when each minute may be your last, you do not think much about other people, nor when you are facing another man with a rifle have you time to consider whether he or you are the invader, or that you are fighting for your home and hearths. All fighting is pretty much alike, I suspect, as to sentiment, when once it begins. But now we had time for reflection ; and although we did not yet quite understand how far the day had gone against us, an uneasy feeling of self-condemnation must have come up in the minds of most of us ; while, above all, we now began to realise what the loss of this

battle meant to the country. Then, too, we knew not what had become of all our wounded comrades. Reaction, too, set in after the fatigue and excitement. For myself, I had found out for the first time that besides the bayonet-wound in my leg, a bullet had gone through my left arm, just below the shoulder, and outside the bone. I remember feeling something like a blow just when we lost the lane, but the wound passed unnoticed till now, when the bleeding had stopped and the shirt was sticking to the wound.

This half-hour seemed an age, and while we stood on this knoll the endless tramp of men and rumbling of carts along the downs beside us told their own tale. The whole army was falling back. At last we could discern the adjutant riding up to us out of the dark. The army was to retreat, and take up a position on Epsom Downs, he said; we should join in the march, and try and find our brigade in the morning; and so we turned into the throng again, and made our way on as best we could. A few scraps of news he gave us as he rode alongside of our leading section; the army had held its position well for a time, but the enemy had at last broken through the line between us and Guildford, as well as in our front, and had poured his men through the point gained, throwing the line into confusion, and the first army corps near Guildford were also falling back to avoid being out-flanked. The regular troops were holding the rear; we were to push on as fast as possible to get out of their way, and allow them to make an orderly retreat in the morning. The gallant old lord commanding our corps had been badly wounded early in the day, he heard, and carried off the field. The Guards had suffered dreadfully; the household

cavalry had ridden down the cuirassiers, but had got into broken ground and been awfully cut up. Such were the scraps of news passed down our weary column. What had become of our wounded no one knew, and no one liked to ask. So we trudged on. It must have been midnight when we reached Leatherhead. Here we left the open ground and took to the road, and the block became greater. We pushed our way painfully along; several trains passed slowly ahead along the railway by the roadside, containing the wounded, we supposed—such of them, at least, as were lucky enough to be picked up. It was daylight when we got to Epsom. The night had been bright and clear after the storm, with a cool air, which, blowing through my soaking clothes, chilled me to the bone. My wounded leg was stiff and sore, and I was ready to drop with exhaustion and hunger. Nor were my comrades in much better case; we had eaten nothing since breakfast the day before, and the bread we had put by had been washed away by the storm: only a little pulp remained at the bottom of my bag. The tobacco was all too wet to smoke. In this plight we were creeping along, when the adjutant guided us into a field by the roadside to rest awhile, and welay down exhausted on the sloppy grass. The roll was here taken, and only 180 answered out of nearly 500 present on the morning of the battle. How many of these were killed and wounded no one could tell; but it was certain many must have got separated in the confusion of the evening. While resting here, we saw pass by, in the crowd of vehicles and men, a cart laden with commissariat stores, driven by a man in uniform. "Food!" cried some one, and a dozen volunteers jumped up and surrounded the cart. The driver tried to whip them off; but he was

pulled off his seat, and the contents of the cart thrown out in an instant. They were preserved meats in tins, which we tore open with our bayonets. The meat had been cooked before, I think; at any rate we devoured it. Shortly after this a general came by with three or four staff-officers. He stopped and spoke to our adjutant, and then rode into the field. "My lads," said he, "you shall join my division for the present: fall in, and follow the regiment that is now passing." We rose up, fell in by companies, each about twenty strong, and turned once more into the stream moving along the road;—regiments, detachments, single volunteers or militiamen, country people making off, some with bundles, some without, a few in carts, but most on foot; here and there waggons of stores, with men sitting wherever there was room, others crammed with wounded soldiers. Many blocks occurred from horses falling, or carts breaking down and filling up the road. In the town the confusion was even worse, for all the houses seemed full of volunteers and militiamen, wounded or resting, or trying to find food, and the streets were almost choked up. Some officers were in vain trying to restore order, but the task seemed a hopeless one. One or two volunteer regiments which had arrived from the north the previous night, and had been halted here for orders, were drawn up along the roadside steadily enough, and some of the retreating regiments, including ours, may have preserved the semblance of discipline, but for the most part the mass pushing to the rear was a mere mob. The regulars, or what remained of them, were now, I believe, all in the rear, to hold the advancing enemy in check. A few officers among *such a crowd* could do nothing. To *add to the confusion, several houses*

were being emptied of the wounded brought here the night before, to prevent their falling into the hands of the enemy, some in carts, some being carried to the railway by men. The groans of these poor fellows as they were jostled through the street went to our hearts, selfish though fatigue and suffering had made us. At last, following the guidance of a staff-officer who was standing to show the way, we turned off from the main London road and took that towards Kingston. Here the crush was less, and we managed to move along pretty steadily. The air had been cooled by the storm, and there was no dust. We passed through a village where our new general had seized all the public-houses, and taken possession of the liquor; and each regiment as it came up was halted, and each man got a drink of beer, served out by companies. Whether the owner got paid, I know not, but it was like nectar. It must have been about one o'clock in the afternoon that we came in sight of Kingston. We had been on our legs sixteen hours, and had got over about twelve miles of ground. There is a hill a little south of the Surbiton station, covered then mostly with villas, but open at the western extremity, where there was a clump of trees on the summit. We had diverged from the road towards this, and here the general halted us and disposed the line of the division along his front, facing to the south-west, the right of the line reaching down to the Thames, the left extending along the southern slope of the hill, in the direction of the Epsom road by which we had come. We were nearly in the centre, occupying the knoll just in front of the general, who dismounted on the top and tied his horse to a tree. It is not much of a hill, but commands an extensive view over the flat country

around ; and as we lay wearily on the ground we could see the Thames glistening like a silver field in the bright sunshine, the palace at Hampton Court, the bridge at Kingston, and the old church tower rising above the haze of the town, with the woods of Richmond Park behind it. To most of us the scene could not but call up the associations of happy days of peace—days now ended and peace destroyed through national infatuation. We did not say this to each other, but a deep depression had come upon us, partly due to weakness and fatigue, no doubt, but we saw that another stand was going to be made, and we had no longer any confidence in ourselves. If we could not hold our own when stationary in line, on a good position, but had been broken up into a rabble at the first shock, what chance had we now of manœuvring against a victorious enemy in this open ground ? A feeling of desperation came over us, a determination to struggle on against hope ; but anxiety for the future of the country, and our friends, and all dear to us, filled our thoughts now that we had time for reflection. We had had no news of any kind since Wood joined us the day before—we knew not what was doing in London, or what the Government was about, or anything else ; and exhausted though we were, we felt an intense craving to know what was happening in other parts of the country.

Our general had expected to find a supply of food and ammunition here, but nothing turned up. Most of us had hardly a cartridge left, so he ordered the regiment next to us, which came from the north and had not been engaged, to give us enough to make up twenty rounds a man, and he sent off a fatigue-party to Kingston to try and get provisions, while a detachment of our fellows was allowed to go foraging among the villas in our rear ; and in about

an hour they brought back some bread and meat, which gave us a slender meal all round. They said most of the houses were empty, and that many had been stripped of all eatables, and a good deal damaged already.

It must have been between three and four o'clock when the sound of cannonading began to be heard in the front, and we could see the smoke of the guns rising above the woods of Esher and Claremont, and soon afterwards some troops emerged from the fields below us. It was the rear-guard of regular troops. There were some guns also, which were driven up the slope and took up their position round the knoll. There were three batteries, but they only counted eight guns amongst them. Behind them was posted the line ; it was a brigade apparently of four regiments, but the whole did not look to be more than eight or nine hundred men. Our regiment and another had been moved a little to the rear to make way for them, and presently we were ordered down to occupy the railway station on our right rear. My leg was now so stiff I could no longer march with the rest, and my left arm was very swollen and sore, and almost useless ; but anything seemed better than being left behind, so I limped after the battalion as best I could down to the station. There was a goods shed a little in advance of it down the line, a strong brick building, and here my company was posted. The rest of our men lined the wall of the enclosure. A staff-officer came with us to arrange the distribution ; we should be supported by line troops, he said ; and in a few minutes a train full of them came slowly up from Guildford way. It was the last ; the men got out, the train passed on, and a party began to tear up the rails, while the rest were distributed among the houses on each side. A sergeant's

party joined us in our shed, and an engineer officer with sappers came to knock holes in the walls for us to fire from ; but there were only half-a-dozen of them, so progress was not rapid, and as we had no tools we could not help.

It was while we were watching this job that the adjutant, who was as active as ever, looked in, and told us to muster in the yard. The fatigue-party had come back from Kingston, and a small baker's hand-cart of food was made over to us as our share. It contained loaves, flour, and some joints of meat. The meat and the flour we had not time or means to cook. The loaves we devoured ; and there was a tap of water in the yard, so we felt refreshed by the meal. I should have liked to wash my wounds, which were becoming very offensive, but I dared not take off my coat, feeling sure I should not be able to get it on again. It was while we were eating our bread that the rumour first reached us of another disaster, even greater than that we had witnessed ourselves. Whence it came I know not ; but a whisper went down the ranks that Woolwich had been captured. We all knew that it was our only arsenal, and understood the significance of the blow. No hope, if this were true, of saving the country. Thinking over this, we went back to the shed.

Although this was only our second day of war, I think we were already old soldiers so far that we had come to be careless about fire, and the shot and shell that now began to open on us made no sensation. We felt, indeed, our need of discipline, and we saw plainly enough the slender chance of success coming out of such a rabble as we were ; but I think we were all determined to fight on as long as we could. Our gallant adjutant gave his spirit to everybody ; and the staff-officer

commanding was a very cheery fellow, and went about as if we were certain of victory. Just as the firing began he looked in to say that we were as safe as in a church, that we must be sure and pepper the enemy well, and that more cartridges would soon arrive. There were some steps and benches in the shed, and on these a part of our men were standing, to fire through the upper loop-holes, while the line soldiers and others stood on the ground, guarding the second row. I sat on the floor, for I could not now use my rifle, and besides, there were more men than loop-holes. The artillery fire which had opened now on our position was from a longish range ; and occupation for the riflemen had hardly begun when there was a crash in the shed, and I was knocked down by a blow on the head. I was almost stunned for a time, and could not make out what had happened. A shot or shell had hit the shed without quite penetrating the wall, but the blow had upset the steps resting against it, and the men standing on them, bringing down a cloud of plaster and brickbats, one of which had struck me. I felt now past being of use. I could not use my rifle, and could barely stand ; and after a time I thought I would make for my own house, on the chance of finding some one still there. I got up therefore, and staggered homewards. Musketry fire had now commenced, and our side were blazing away from the windows of the houses, and from behind walls, and from the shelter of some trucks still standing in the station. A couple of field-pieces in the yard were firing, and in the open space in rear a reserve was drawn up. There, too, was the staff-officer on horseback, watching the fight through his field-glass. I remember having still enough sense to feel that the position was a hope-

less one. That straggling line of houses and gardens would surely be broken through at some point, and then the line must give way like a rope of sand. It was about a mile to our house, and I was thinking how I could possibly drag myself so far when I suddenly recollected that I was passing Travers's house,—one of the first of a row of villas then leading from the station to Kingston. Had he been brought home, I wondered, as his faithful old servant promised, and was his wife still here? I remember to this day the sensation of shame I felt, when I recollected that I had not once given him—my greatest friend—a thought since I carried him off the field the day before. But war and suffering make men selfish. I would go in now at any rate and rest awhile, and see if I could be of use. The little garden before the house was as trim as ever—I used to pass it every day on my way to the train, and knew every shrub in it—and a blaze of flowers, but the hall-door stood ajar. I stepped in and saw little Arthur standing in the hall. He had been dressed as neatly as ever that day, and as he stood there in his pretty blue frock and white trousers and socks showing his chubby little legs, with his golden locks, fair face, and large dark eyes, the picture of childish beauty, in the quiet hall, just as it used to look—the vases of flowers, the hat and coats hanging up, the familiar pictures on the walls—this vision of peace in the midst of war made me wonder for a moment, faint and giddy as I was, if the pandemonium outside had any real existence, and was not merely a hideous dream. But the roar of the guns making the house shake, and the rushing of the shot, gave a ready answer. The little fellow appeared almost unconscious of the scene around him, and was walking up

the stairs holding by the railing, one step at a time, as I had seen him do a hundred times before, but turned round as I came in. My appearance frightened him, and staggering as I did into the hall, my face and clothes covered with blood and dirt, I must have looked an awful object to the child, for he gave a cry and turned to run toward the basement stairs. But he stopped on hearing my voice calling him back to his god-papa, and after a while came timidly up to me. Papa had been to the battle, he said, and was very ill: mamma was with papa: Wood was out: Lucy was in the cellar, and had taken him there, but he wanted to go to mamma. Telling him to stay in the hall for a minute till I called him, I climbed up-stairs and opened the bedroom-door. My poor friend lay there, his body resting on the bed, his head supported on his wife's shoulder as she sat by the bedside. He breathed heavily, but the pallor of his face, the closed eyes, the prostrate arms, the clammy foam she was wiping from his mouth, all spoke of approaching death. The good old servant had done his duty, at least,—he had brought his master home to die in his wife's arms. The poor woman was too intent on her charge to notice the opening of the door, and as the child would be better away, I closed it gently and went down to the hall to take little Arthur to the shelter below, where the maid was hiding. Too late! He lay at the foot of the stairs on his face, his little arms stretched out, his hair dabbled in blood. I had not noticed the crash among the other noises, but a splinter of a shell must have come through the open doorway; it had carried away the back of his head. The poor child's death must have been instantaneous. I tried to lift up the little corpse with my one arm, but even this load was too much for me,

and while stooping down I fainted away.

When I came to my senses again it was quite dark, and for some time I could not make out where I was ; I lay indeed for some time like one half asleep, feeling no inclination to move. By degrees I became aware that I was on the carpeted floor of a room. All noise of battle had ceased, but there was a sound as of many people close by. At last I sat up and gradually got to my feet. The movement gave me intense pain, for my wounds were now highly inflamed, and my clothes sticking to them made them dreadfully sore. At last I got up and groped my way to the door, and opening it at once saw where I was, for the pain had brought back my senses. I had been lying in Travers's little writing-room at the end of the passage, into which I made my way. There was no gas, and the drawing-room door was closed ; but from the open dining-room the glimmer of a candle feebly lighted up the hall, in which half-a-dozen sleeping figures could be discerned, while the room itself was crowded with men. The table was covered with plates, glasses, and bottles ; but most of the men were asleep in the chairs or on the floor, a few were smoking cigars, and one or two with their helmets on were still engaged at supper, occasionally grunting out an observation between the mouthfuls.

"Sind wackere Soldaten, diese Englischen Freiwilligen," said a broad-shouldered brute, stuffing a great hunch of beef into his mouth with a silver fork, an implement I should think he must have been using for the first time in his life.

"Ja, ja," replied a comrade, who was lolling back in his chair with a pair of very dirty legs on the table, and one of poor Travers's best cigars in his mouth ; "Sie so gut laufen können."

"Ja wohl," responded the first speaker ; "aber sind nicht eben so schnell wie die Französischen Mobloten."

"Gewiss," grunted a hulking lout from the floor, leaning on his elbow, and sending out a cloud of smoke from his ugly jaws ; "und da sind hier etwa gute Schützen."

"Hast recht, lange Peter," answered number one ; "wenn die Schurken so gut exerciren wie schützen könnten, so wären wir heute nicht hier !"

"Recht ! recht !" said the second ; "das exerciren macht den guten Soldaten."

What more criticisms on the shortcomings of our unfortunate volunteers might have passed I did not stop to hear, being interrupted by a sound on the stairs. Mrs Travers was standing on the landing-place ; I limped up the stairs to meet her. Among the many pictures of those fatal days engraven on my memory, I remember none more clearly than the mournful aspect of my poor friend, widowed and childless within a few moments, as she stood there in her white dress, coming forth like a ghost from the chamber of the dead, the candle she held lighting up her face, and contrasting its pallor with the dark hair that fell disordered round it, its beauty radiant even through features worn with fatigue and sorrow. She was calm and even tearless, though the trembling lip told of the effort to restrain the emotion she felt. "Dear friend," she said, taking my hand, "I was coming to seek you ; forgive my selfishness in neglecting you so long ; but you will understand"—glancing at the door above—"how occupied I have been." "Where," I began, "is"—"my boy ?" she answered, anticipating my question. "I have laid him by his father. But now your wounds must be cared for ;

how pale and faint you look !—rest here a moment,”—and, descending to the dining-room, she returned with some wine, which I gratefully drank, and then, making me sit down on the top step of the stairs, she brought water and linen, and, cutting off the sleeve of my coat, bathed and banded my wounds. ’Twas I who felt selfish for thus adding to her troubles ; but in truth I was too weak to have much will left, and stood in need of the help which she forced me to accept ; and the dressing of my wounds afforded indescribable relief. While thus tending me, she explained in broken sentences how matters stood. Every room but her own, and the little parlour into which she with Wood’s help had carried me, was full of soldiers. Wood had been taken away to work at repairing the railroad, and Lucy had run off from fright ; but the cook had stopped at her post, and had served up supper and opened the cellar for the soldiers’ use : she did not understand what they said, and they were rough and boorish, but not uncivil. I should now go, she said, when my wounds were dressed, to look after my own home, where I might be wanted ; for herself, she wished only to be allowed to remain watching there—pointing to the room where lay the bodies of her husband and child—where she would not be molested. I felt that her advice was good. I could be of no use as protection, and I had an anxious longing to know what had become of my sick mother and sister ; besides, some arrangement must be made for the burial. I therefore limped away. There was no need to express thanks on either side, and the grief was too deep to be reached by any outward show of sympathy.

Outside the house there was a good deal of movement and bustle ; many carts going along, the wag-

goners, from Sussex and Surrey, evidently impressed and guarded by soldiers ; and although no gas was burning, the road towards Kingston was well lighted by torches held by persons standing at short intervals in line, who had been seized for the duty, some of them the tenants of neighbouring villas. Almost the first of these torch-bearers I came to was an old gentleman whose face I was well acquainted with, from having frequently travelled up and down in the same train with him. He was a senior clerk in a Government office, I believe, and was a mild-looking old man with a prim face and a long neck, which he used to wrap in a white double neckcloth, a thing even in those days seldom seen. Even in that moment of bitterness I could not help being amused by the absurd figure this poor old fellow presented, with his solemn face and long cravat doing penance with a torch in front of his own door, to light up the path of our conquerors. But a more serious object now presented itself, a corporal’s guard passing by, with two English volunteers in charge, their hands tied behind their backs. They cast an imploring glance at me, and I stepped into the road to ask the corporal what was the matter, and even ventured, as he was passing on, to lay my hand on his sleeve. “Auf dem Wege, Spitzbube !” cried the brute, lifting his rifle as if to knock me down. “Must one prisoners who fire at us let shoot,” he went on to add ; and shot the poor fellows would have been, I suppose, if I had not interceded with an officer, who happened to be riding by. “Herr Hauptmann,” I cried, as loud as I could, “is this your discipline, to let unarmed prisoners be shot without orders ?” The officer, thus appealed to, reined in his horse, and halted the guard

till he heard what I had to say. My knowledge of other languages here stood me in good stead, for the prisoners, north-country factory hands apparently, were of course utterly unable to make themselves understood, and did not even know in what they had offended. I therefore interpreted their explanation: they had been left behind while skirmishing near Ditton, in a barn, and coming out of their hiding-place in the midst of a party of the enemy, with their rifles in their hands, the latter thought they were going to fire at them from behind. It was a wonder they were not shot down on the spot. The captain heard the tale, and then told the guard to let them go, and they slunk off at once into a byroad. He was a fine soldier-like man, but nothing could exceed the insolence of his manner, which was perhaps all the greater because it seemed not intentional, but to arise from a sense of immeasurable superiority. Between the lame *freiwilliger* pleading for his comrades, and the captain of the conquering army, there was, in his view, an infinite gulf. Had the two men been dogs, their fate could not have been decided more contemptuously. They were let go simply because they were not worth keeping as prisoners, and perhaps to kill any living thing without cause went against the *hauptmann's* sense of justice. But why speak of this insult in particular? Had not every man who lived then his tale to tell of humiliation and degradation? For it was the same story everywhere. After the first stand in line, and when once they had got us on the march, the enemy laughed at us. Our handful of regular troops was sacrificed almost to a man in a vain conflict with *numbers*; our volunteers and militia, *with officers who did not know their*

work, without ammunition or equipment, or staff to superintend, starving in the midst of plenty, we had soon become a helpless mob, fighting desperately here and there, but with whom, as a manœuvring army, the disciplined invaders did just what they pleased. Happy those whose bones whitened the fields of Surrey; they at least were spared the disgrace we lived to endure. Even you, who have never known what it is to live otherwise than on sufferance, even your cheeks burn when we talk of these days; think, then, what those endured who, like your grandfather, had been citizens of the proudest nation on earth, which had never known disgrace or defeat, and whose boast it used to be that they bore a flag on which the sun never set! We had heard of generosity in war; we found none: the war was made by us, it was said, and we must take the consequences. London and our only arsenal captured, we were at the mercy of our captors, and right heavily did they tread on our necks. Need I tell you the rest?—of the ransom we had to pay, and the taxes raised to cover it, which keep us paupers to this day?—the brutal frankness that announced we must give place to a new naval Power, and be made harmless for revenge?—the victorious troops living at free quarters, the yoke they put on us made the more galling that their requisitions had a semblance of method and legality? Better have been robbed at first hand by the soldiery themselves, than through our own magistrates made the instruments for extortion. How we lived through the degradation we daily and hourly underwent, I hardly even now understand. And what was there left to us to live for? Stripped of our colonies; Canada and the West Indies gone to America; Australia forced to

separate; India lost for ever, after the English there had all been destroyed, vainly trying to hold the country when cut off from aid by their countrymen; Gibraltar and Malta ceded to the new naval Power; Ireland independent and in perpetual anarchy and revolution. When I look at my country as it is now—its trade gone, its factories silent, its harbours empty, a prey to pauperism and decay—when I see all this, and think what Great Britain was in my youth, I ask myself whether I have really a heart or any sense of patriotism that I should have witnessed such degradation and still care to live! France was different. There, too, they had to eat the bread of tribulation under the yoke of the conqueror; their fall was hardly more sudden or violent than ours; but war could not take away their rich soil; they had no colonies to lose; their broad lands, which made their wealth, remained to them; and they rose again from the blow. But our people could not be got to see how artificial our prosperity was—that it all rested on foreign trade and financial credit; that the course of trade once turned away from us, even for a time, it might never return; and that our credit once shaken might never be restored. To hear men talk in those days, you would have thought that Providence had ordained that our Government should always borrow at three per cent, and that trade came to us because we lived in a foggy little island set in a boisterous sea. They could not be got to see that the wealth heaped up on every side was not created in the country, but in India and China, and other parts of the world; and that it would be quite possible for the people who made money by buying and selling the natural treasures of the earth, to go and live in other places, and take their profits with them. Nor would

men believe that there could ever be an end to our coal and iron, or that they would get to be so much dearer than the coal and iron of America that it would no longer be worth while to work them, and that therefore we ought to insure against the loss of our artificial position as the great centre of trade, by making ourselves secure and strong and respected. We thought we were living in a commercial millennium, which must last for a thousand years at least. After all, the bitterest part of our reflection is, that all this misery and decay might have been so easily prevented, and that we brought it about ourselves by our own shortsighted recklessness. There, across the narrow Straits, was the writing on the wall, but we would not choose to read it. The warnings of the few were drowned in the voice of the multitude. Power was then passing away from the class which had been used to rule, and to face political dangers, and which had brought the nation with honour unsullied through former struggles, into the hands of the lower classes, uneducated, untrained to the use of political rights, and swayed by demagogues; and the few who were wise in their generation were denounced as alarmists, or as aristocrats who sought their own aggrandisement by wasting public money on bloated armaments. The rich were idle and luxurious; the poor grudged the cost of defence. Politics had become a mere bidding for Radical votes, and those who should have led the nation, stooped rather to pander to the selfishness of the day, and humoured the popular cry which denounced those who would secure the defence of the nation by enforced arming of its manhood, as interfering with the liberties of the people. Truly the nation was ripe for a fall; but when I reflect how

a little firmness and self-denial, or political courage and foresight, might have averted the disaster, I feel that the judgment must have really been deserved. A nation too selfish to defend its liberty, could not have been fit to retain it. To you, my grandchildren, who are now going to seek a new home in a more prosperous land, let not this bitter lesson be lost upon you in the

country of your adoption. For me, I am too old to begin life again in a strange country; and hard and evil as have been my days, it is not much to await in solitude the time which cannot now be far off, when my old bones will be laid to rest in the soil I have loved so well, and whose happiness and honour I have so long survived.

IMPRESSIONS OF GREECE.

LATE events have given a sad celebrity to Greece amongst us. Great and terrible as have been the incidents of Europe within the last eight months, the disaster of Oropus has not been erased from memory by the overwhelming slaughter of the battle-field, the devastation of cities, and the downfall of a great nation.

Nothing could more convincingly demonstrate how deeply the feeling of England has sympathised with this dire calamity, than the fact that amidst the crash of a mighty empire, and a convulsion that threatens to change the condition of the world, men still turn to the history of that sad morning at Marathon; while through the cares of a most eventful moment our Foreign Minister directs his especial attention to this question, and has within the last few days formally made the demand on Greece to reopen the inquiry, and investigate the case from the beginning.

The volume whose title stands at the head of the present paper has its especial value for us at this time. First of all, these are the "impressions" of a most competent and fair-

minded witness. Sir Thomas Wyse, for years our Minister in Greece, was eminently suited to the task that fell to his lot. To the claims of scholarship and learning he added the gifts of the practical politician and the statesman; and not less than either was he a true philanthropist, who could take the warmest interest in the daily life and habits of a simple people,—study their wants, weigh their ambitions, and carefully consider how far their hopes as a nation might reasonably contribute to their welfare and prosperity.

But there was another merit, more especially his own. No minister of any country more laboured than Sir Thomas Wyse to eradicate from Greece that spirit of dependence on the protecting Powers which has been at once the shame of all Greek politicians and the destruction of anything like a national party. That the country should be the Greece of the Greeks, and not of Russia, of England, or of France, was his crowning idea.

The men who have known Greece personally, and through intimate acquaintance with its people, are

F. I. Asfield

LECTURE.

(Series to Officers of Volunteer Corps.)

Tuesday Evening, March 25th.

Lieutenant-General the Honourable Sir JAMES LINDSAY, K.C.M.G.,
Inspector-General of Reserve Forces, in the Chair.

THE RECENT WAR WITH REFERENCE TO THE MILITIA AND VOLUNTEERS.

By CAPTAIN HOME, R.E., Topographical and Statistical Department,
War Office.

THE subject on which I am going to address you this evening is, the late war, and its bearing on our Militia and Volunteer forces.

After a great revolution has taken place in the world, whether it be a military or a civil revolution, it is a matter of importance to consider all the subjects upon which light has been thrown, and to examine our own institutions in the light so obtained; not with the view of blindly adopting what has proved advantageous in other countries, but with the view of modifying and amending our own institutions by the experience of others.

There is nothing more dangerous than the constant habit people have of running after and seeking to adopt the customs and institutions of other nations without reference to the peculiar idiosyncrasy produced by race, education, and habits. Blindly to follow others, is to remain always behind them.

I remember many years ago, hearing the celebrated Kossuth, pleading for some foreign revolutionary Government to an English audience. He described how completely the Constitution they adopted was based on the English Constitution; how carefully they had followed the English system, adopting Houses of Lords and Commons, responsible Government, &c.; and he wound up by saying, as an additional reason for our sympathy, "the very tables in the Houses of Assembly were "faithful copies of those in the English Parliament House." Need it be added, that that Government lasted but a day; it fell at once, because it was based not on the feelings, ideas, habits, and associations of the people, but on those of a foreign and unsympathetic race.

Failure, I believe, will be the inevitable result of all attempts on the part of any nation blindly to copy others; in most cases, people will

find, that they have imported the evil, which is a portion of all human institutions, and have left the good behind. But it is very different when an attempt is made not to copy, but to assimilate, to endeavour to grasp the spirit of the institutions that have led to success, not their outward forms. Viewed in such a way, much and lasting benefit may be obtained by a careful study of other nations, more especially if their action during great periods of national success or disaster, is observed. Such a period has swept over Europe during the last half a dozen years. We, fortunately for ourselves, have been looking on; and it becomes all the more desirable for us to use the position of lookers-on, who proverbially see more of the game than the players, and examine our own institutions, seeking not to copy, like Chinese, what others have done, but rather to assimilate or graft on to our own institutions what is really useful and in consonance with the peculiar genius of our nation.

The last six years have been years of great progress in the military art. Many old theories and practices have been swept away, not because they were always false or wrong in themselves, but because altered circumstances have made them so. New theories and new practices have sprung up, which will similarly in the future have, for similar reasons, to be discarded in their turn.

The recent war between Germany and France offers many most interesting and most important points for consideration. I propose to ask your attention to the consideration of one of these points, and that perhaps not the least important, viz., the part played in the war by irregular troops. I use the word *irregular* troops, to embrace all bodies of men armed for the defence of the State, who are not by trade or profession, soldiers.

Both in France and Prussia there were no bodies corresponding with what are termed in England the auxiliary forces; and, prior to considering what the irregular forces did and what they failed to accomplish, it will be well briefly to recall to mind the military system as it existed in Prussia and France in the year 1870.

In the former country, Prussia, there were no irregular troops at all, or, the whole army was composed of irregular troops, according as the question is considered; for with the exception of the Officers, and a small proportion of the non-commissioned officers, not one man followed the trade or calling of a soldier, but all the men of the country were trained as soldiers.

On completing his twentieth year, every Prussian is bound to serve for three years in the ranks, after which term, or more generally after two and a half years, he is passed into the reserve, where he serves for four years, liable to certain trainings, and liable to again being placed in the ranks if war compels the country to call on him for his services. Subsequently he is transferred to the Landwehr, where he serves for five years, and is liable for home defence, or for service in certain auxiliary services of the army only.

Thus you see that the whole manhood of the country is trained as soldiers; and yet, with the exception of the officers and some few others, you can say of no Prussian that he is by trade a soldier.

It is very desirable that this fact should be kept in view, that the Prussian system gives no place for untrained or irregular soldiers, but it exacts military service from every man in the country, and, consequently, in the ranks of the fighting army, there are men as well educated as any the country can produce; the soldier is not the most ignorant man the State can find, but he is a fair representative of the average intellectual force of the country.

In France, on the contrary, everything was different.* The French Army was almost entirely composed of professional soldiers, that is to say, of men who came into the army to find there a living, a pursuit, or avocation. True, there was a conscription, but the conscription worked in such a way that it really had no effect in making the army what the Prussian Army is—the reflex of the nation. All the young men who became twenty years of age, and were termed the annual class, amounted to about 350,000; these drew lots, and about 100,000 were selected, who were termed the contingent. The other 250,000 completely escaped military service. The contingent of 100,000 was divided into two portions: the first portion, usually about 40,000, was ordered for service in the ranks; the remainder was left undrawn, and only called on in case of war. Of the 40,000 actually ordered to join, rather more than one-half purchased substitutes, paying the Government about £90 to escape; the Government formed these payments into a fund, out of which old soldiers, that is, men who had completed their period of five years' service, were given a bounty of £80 to re-engage. As you may imagine, this sum was a great inducement, and the sums paid to soldiers thus amounted to £2,000,000 a year; a tax really levied on the well-to-do classes of society, and which they paid for national defence over and above, what other classes paid. All the men who did not receive the bounties were drafted into the reserve, where they served for four years, but were not liable to be trained. The remainder of the young men, including those who purchased substitutes, were formed into what was termed the National Guard Mobile. This guard was drilled; but when you are told, that no drill or training was allowed to cause them a loss of more than one day at a time, or of fifteen days a year, you can understand the amount of knowledge these men acquired.

The French Army was thus composed: of the regular Army, of whom only 20,000 came each year from the conscription; the reserve, composed partly of men who had served five years in the ranks; partly of the second portion of the contingent; and of the Guard Mobile, composed of all the other young men of the country. These laws came into effect in 1868, and war, as you know, broke out in 1870, before even the laws were well in force.

You will now see the great difference between the two military systems. In Prussia there were no irregular troops, at the same time there was no professional Army. But the Army, with its various battalions, regiments, brigades, divisions, and corps, was like a huge framework, into which the whole manhood of the country fitted, trained

* The new law of recruiting in France has placed the French Army on the footing of universal compulsory service.

carefully beforehand, each man having his own definite place and function detailed for him.

In France, bad as the system was, it had not even had time to get into working order; the reserve men of the various regiments were few in number, and lived, in most cases, at great distances from the regiments of which they composed the reserves. The Mobiles were not only untrained, and unprovided with arms, accoutrements, or clothes, but were not even told-off in battalions or regiments.

In Prussia, a regiment lived always amongst its reserve-men. All that had to be done, to place it on a war footing, was to put out an order directing the reserve-men to rejoin, and they came in, took their arms and clothes from the store, and fell into their places on parade, having all already been trained carefully. In France, the reserve-men were almost entirely composed of the second portion of the contingent, were untrained, and had to seek their clothes and arms, not close at hand, but at depôts distant many miles, sometimes the whole extent of France. And when they finally did arrive, I need not tell you how much the presence of utterly untrained men in the ranks tended to reduce the value of the battalions.

Further, there arose great evils from the fact of the French Army being professional. A professional body usually is, more or less, a close borough, that is, it looks with suspicion and dislike on anyone else who attempts to invade its province. Trade unionism among workmen is one phase of this professional feeling. The dislike and contempt that the French Army, and more especially the non-commissioned Officers and Officers from the ranks, of whom there were a very large number, regarded the Mobile was most remarkable; the terms of contempt—Pekin, Epicier—were freely lavished on the civilians. But, we must confess, that the other party, or the civilian soldiers, returned the dislike most cordially. A Prussian Officer, writing about this, remarks, that a French company was, on one occasion, captured; the Officers said, "We have to yield; we can do nothing with such miserable scoundrels." The men confidentially informed the Prussians, "We could do nothing with our scoundrel Officers, who actually would not let us eat apples." Which were the scoundrels I don't know, but the mutual feeling is worth noting.

The Army in France was thus a body distinct from the nation, and a body that had a strong interest, namely, a pecuniary, one in keeping itself distinct; for if really amalgamated, the large bounties paid to soldiers on re-enlistment, nay re-enlistment itself would disappear, as they have now done. In Prussia, the Army was the nation; the nation was the Army. Everything was done to raise its importance, to increase its self-confidence. No appointment could be obtained in Prussia by men who had not served in the Army; all the honours, all the rewards, all the emoluments, fell to the Army; it was the door to advancement of all kinds. It was looked on as a fundamental institution of the State; nay, even as a holy and sacred thing, and, in churches when the Almighty was asked to bless the King and country, especial blessings were invoked on the Army, on which the security of the country rested.

In France, the Army was at one time flattered by seditious persons, who sought to make of it a lever to gain, or a vice, to hold power; its pulse was felt by political intriguers, and the fact that all soldiers had votes, produced corruption in a country where elections are by no means pure. At other times, the Army was made the object of abuse by demagogues, who sought to win cheap popularity by pointing to its cost, and strove to reduce the pay of the soldier, curtail his privileges, or injure his position.

In Prussia, not only were the officers good, but there were considerable reserves of them; for to avoid service in the ranks, every one possessed of sufficient education, sought service in the commissioned grades through the Military Colleges, and many being the sons of country gentlemen, left the Army early in life. It is a curious fact that promotion to the rank of Captain was very slow, taking nearly eighteen years, but the rank of General was reached in seventeen more, or at thirty-five years' service. The great exodus from the Army took place at the Captain's grade, when nearly two-thirds of the Officers left; these retired to their homes, but were bound to serve in case of war. From these the State drew the reserve of Officers, who trained recruits, officered the Landwehr, and commanded at home while the Army was fighting. And this, gentlemen, is a very important point. If the Army is fighting—on the best place for war—a foreign soil; how are the dépôts, recruits, and reserves to be trained, and acquire that solidity which they should possess? Prussia answered the question simply and well. Far from seeking to retain Officers, she let them go, keeping a lien on them; thus those only who had strong military instincts remained or gained the higher grades.

In France, as you know, promotion from the ranks was greatly resorted to, two out of three vacancies being so given.

But although the theory was, that every French soldier can, if he searches well, find a Field Marshal's baton in his pack, yet the practice differed much, and few found there even a Field Officer's Commission. The consequence was, the junior grades of the Commissioned Officers were clogged with old worn-out men. And there were no large reserves of able Officers fit to train recruits or officer the Mobile. In France every Officer is employed; when the Army marches few are left behind available for the numerous and most important home-duties. The officers of the regular Army did not receive from their men that obedience and respect which is one of the first necessities in war. This was no new thing in the French Army in the Italian war, the cry, "*Les epaulettes en avant*," was commonly heard, as if the men were reproving their leaders.

A French Officer speaking of this says, that for many years discipline in the Army had been much relaxed, and he gives some causes, amongst which was the fact that the National Guard, a political rather than a military force, were allowed to elect their Officers; that the men in regiments quartered in towns, who saw that elected Officers were more or less the servants of the men, felt ill-disposed to obey their own Officers, and that the junior Officers in the Army being

usually old non-commissioned officers tended to bring the commissioned grade into contempt. But the most striking reason given is, that the Officers had little or no intercourse with the men. In France it has been for many years a theory that what we term in England the interior economy of companies, battalions, and regiments, should be looked after, not by their own Officers, but by non-commissioned Officers and the Intendance or Control Department. The great Napoleon, who usually took the soundest views of all military matters, used the words "That it is degrading to an Officer to mix himself up with the clothing, rations, or pay of the soldier; this is the work of the non-commissioned Officer." Now there cannot be a greater, or a more fatal error than this; and it has followed from the French always disregarding these points, that the Officers know little of, and care less for their men. Discipline can be best maintained by personal contact of the superior with his inferiors; and the provision of food, arms, and clothing for the men, keeps the superior in contact with the inferior, and induces the latter to lean on, and be governed and guided by the former. Hence we find French soldiers disregarding the commands, prayers, entreaties of their Officers, and acting just as they think fit. War tests discipline, and in presence of danger men will disregard the orders of those who they may, under other circumstances, obey. When we know that such things occurred in the regular Army, it is not surprising to find that the raw levies were completely out of control. And we hear that in many cases the men simply disregarded their Officers, who took no notice whatever of them. In front of Orleans, when it was evacuated on the advance of the Prussians, the Mobs simply went away from the works they should have defended, and the Officers followed. We read in the indignant protests of railway managers, that these Officers on arriving at a station left their men to do what they liked, and got into the first-class carriages and remained there smoking—the men fighting, drinking, and deserting all over the towns.

This fatal precept of Napoleon, great man as he was, has done much harm to the French Army.

In England, what is termed regimental duty or interior economy, looking after the soldier, after his arms, his clothes, his well-being, has been attended to, as it has in no other country in the world; and an English Officer would resent any attempt to remove this duty from his hands: and the natural results have followed. Not only nowhere are the men better seen after, but nowhere is the same respect for the Officers, the same obedience, the same subordination, as with us. Now this is a thing which irregular forces have but little prospect of practising. Militia regiments are embodied for a short time, and the peculiar nature of the Volunteer service renders this constant care impossible. Hence, however well an Officer may be capable of doing this work, he can rarely rely on it as a means of giving him personal influence; and one lesson we learn from the recent war, is the necessity of personal influence. Such influence as I refer to, is often given by the position of some country gentleman, by the position of some person who is a large employer of labour, but it remains only with those individuals, and does not penetrate to all the Officers. Let me venture to remind

you, that during the Autumn manœuvres is an invaluable time for showing men that their Officers are really desirous of their well-being, that their wants are looked after, and their comforts seen to. Hence such periods as Volunteers are under canvas, are of great value to the Officers, in enabling them to look after their men, to get to know them, and thus to unite the various ranks together. And I would venture to urge on every Volunteer Officer who takes a part in the Autumn manœuvres especially to study this subject; I believe in it is to be found the most important and valuable means of acquiring influence, and no Volunteer Officer who takes the trouble (as I know from personal observation that many do) but will find his time, labour, and occasionally real hard work, amply repaid him.

Such, then, were the military arrangements of the two great States, Prussia and France.

In one the position of every man was carefully determined and fixed, and he was trained during peace for the position he had to occupy during war. There was an able well-trained body of Officers who commanded all troops. Reserve men were not commanded by different Officers from line troops, neither were Landwehr men; all had learned their business and duty together, thus the whole manhood of the nation was carefully arranged and bound together with the chains of an iron discipline. There were traditions of steady, calm work; there were traditions of great things done, glorious victories achieved, not so much by genius, but by patient care and painstaking. This was the genius of the nation; and, gentlemen, traditions have great influence over nations, as well as over regiments, battalions, and individuals.

In France there was a brave, well-drilled, warlike Army, and there was a vast number, nearly 600,000 irregular troops of all kinds, over whom the State had some control, but they were untrained, unofficered, not even formed in battalions or companies. There were traditions, too, on the French side. Traditions of rapid marches, marvellous combinations, made with lightening speed, and of battles fought under the inspiration of the greatest military genius the world has ever known. Such traditions are dangerous, they trust all on the genius of the individual, not on the patient endurance of the many. It is a painful thing, and a thing we often see in the world when great things are expected from some person, that he spends his energy in trying to reach the standard of what others expect, not what he is really capable of. Meeting check after check, he at length falls back disgusted, and does not even try to reach that point which is within his grasp. Without the genius of a Napoleon to direct them, the French strove to act, as all the world thought and expected they would act.

Such, gentlemen, is an imperfect sketch of the military arrangements of these two countries. On the one side was a great body of perfectly trained men, on the other a mass of trained, partly trained, and untrained soldiers.

Such, I repeat, was the state of affairs when war broke out suddenly, for, it was declared but fifteen days, after a proposal to reduce the

nominal contingent from 100,000 to 90,000 men was, for economical motives, passed in the French Assembly.

Very quietly, very gently, with all the power of great stored up force, the Prussian Army swelled up from a peace to a war-footing, it rose so gradually, the operations connected with the mobilization were made with such care, such completeness, that twenty days after war was declared, when the wave broke on the French shores, the perfection of all the arrangements seemed marvellous.

The French Army with a feverish excitement, an eager haste, was flung down at Strasburg and Metz. Regiments went off without calling in their men on furlough, or their reserves, and far below their proper strength. Looking at the French transport returns, I find that the strength of every regiment was largely below its proper footing. The war strength of a French regiment was 70 officers, 2,890 men, 39 horses, and 14 carriages. The strongest regiment that moved to Metz was 5 Officers, 1,290 men, 28 horses, and 3 carriages below this strength. The reserve men who should have helped to fill up these gaps, wandered about the country without Officers, without control, and assembled at some of the railway stations in such large bodies that troops had to be called on to rescue the property of civilians from their grasp. No arrangements had been made for getting these men into the ranks, and after doing much injury causing great confusion and trouble, they gradually subsided and melted away.

The Mobile, who numbered nearly 400,000 men were called out, and each regular regiment left a dépôt battalion, consisting of two companies from each of the battalions composing it, to train and organize the Mobile. But it is impossible to organize as troops, men who have neither Officers, arms, nor clothes.

I need not do more than recall to your mind how MacMahon was defeated at Woerth, Froissard at Spicheren, and Bazaine shut up in Metz on the 18th August.

A pressing necessity arose, if possible, to relieve Bazaine, and the whole of the dépôt battalions left behind, were put together as regiments *de marche*, and hurried from Châlons to Sedan. The Mobiles, who accompanied this disorganized force, from the fact of their being untrained, tended greatly to retard its progress. You all know how this Army fell at Sedan, and how, in the middle of September, Paris was blockaded. To Paris, Vinoy's corps, the only body in France that possessed any shape or form, and numbered about 30,000 fell back. To Paris, all the Officers and Non-Commissioned Officers all over the country were ordered. To Paris large numbers, 100,000 of the best Mobiles were sent. And in Paris were the chief stores, arsenals, War Office employes, and officials of all kinds.

There were plenty of men in France, and plenty of courage, the men were ready, willing, anxious to fight. But the regular Army had disappeared, there were only 4 regiments of infantry, 1 regiment of cavalry, and 1 battery of artillery. And from these, and hundreds of thousands of men, an Army was to be constructed at once.

Just think what this means. The men were untrained, there was no one to train them, Admirals and Post Captains were in command of

divisions and brigades, subalterns and sergeants commanded battalions and regiments, privates in the regular Army commanded companies; to know the manual and platoon was to be an Officer at once. Such was the Army sent forth to combat the veteran hosts of Germany with no doubtful result, for recent wars have shown that neither courage, devotion, nor skill in the use of arms will compensate for want of professional knowledge.

The Mobiles levied in different parts of France were very different in character; those from the great towns were usually shrewd, sharp-witted men, too clever by half, who imagined that they knew everything, and all the rest of the world were ignorant. The Mobiles from the provinces, more dense but more docile, and better under control, had the elements of good soldiers. And, gentlemen, all Frenchmen are brave. One thing that shines bright through all the misfortunes of France, is the personal gallantry of her sons.

The peculiar temper and tone of the Mobiles from the great towns in France, is well exemplified by the following extract from one of the most interesting and touching little books I have ever read, and one which I think every one who desires to have an idea of what really breaks down an irregular army, should read. The book is edited by Dr. Vaughan of the Temple, and is called "Eight Months on Duty."

The writer, who is a son of one of the old French *noblesse*, giving an account of his battalion of Mobile at Châlons, says :—

"We soon attained some proficiency in the art of marching, and also in the execution of the first simple manœuvres, and we had learned also, how to handle a rifle. Parisians are not slow in learning, as to discipline, we prided ourselves on ignoring the word altogether, we gave it clearly to be understood, that we were not soldiers, but the Mobile National Guard, we expected to be treated with respect, to be commanded with politeness, consequently the most complete antagonism existed between the Officers in command and the citizens they were trying to convert into soldiers; on the other hand, there were some Officers who seemed to regard it as their chief duty to exercise the men in humility and patience, those virtues so eminently Parisian! and to accustom them to receive the harshest reprimand in silence, some well-bred young men there were amongst the Captains and Lieutenants, who treated their subordinates with exquisite urbanity, abstaining from the infliction of all punishments, and exhibiting on all occasions that modesty which is the characteristic of intelligent inexperience—these Officers were popular, but scarcely escaped the reproach of incapacity, which is so often the reward of an absence of all pretension.

"On one of the first days of August, Marshal Canrobert came to review the battalions which had just arrived, there had been some disturbances and he uttered a few severe words; instantly his voice was drowned by tumultuous cries and shouts, he saw that he had got out of his element and he hastily withdrew.

"It cannot be said that any of these men, to whatever class they belonged, were wanting in physical courage, but the greater number of them showed a profound horror of anything approaching enthu-

"siasm, devotion, or greatness of soul. Our chief desire was not to be heroes, but to pass for sagacious and clever politicians, zeal was universally condemned, and reason alone was in the ascendant. Logic was appealed to in discussions on all subjects."

Such is a sketch of the irregular troops that accompanied and hampered MacMahon, as he moved on his march to Sedan; such were the troops that were surprised at Beaumont, and surrendered at Sedan. The only chance the rash expedition of MacMahon had of success, was speed; his Army marched about six miles a day on an average.

But if we look at the irregular troops that fought on the Loire, and who composed Chanzy's Army, we find more discipline, more devotion, an earnest desire to do their duty, and an endurance of cold, hunger, and misery of all kinds, that make one regret deeply that so much endurance, and fortitude, should have achieved such small results.

We read the history, in the same little book I referred to, of the 30th Regiment de Marche, and especially of the Battalion of Mortain, which was 1,400 strong. It was formed on the 25th August, but five Officers had ever served before or had uniform, they were more than a month without arms and then got muzzle-loaders, they were two months without getting clothes of any kind, some never got uniform trousers at all, many never got knapsacks, and made the campaign fighting while carrying small carpet bags. The hardships these men endured, and the fortitude they displayed, well deserved a better fate. The following gives an idea of what these brave men endured:—"We had hoped that after so frightful a day, we might have found tolerable quarters (they had marched 27 miles) in the little town of Sillé, but when we were three miles off, we saw the road in front illumined by a yellow smoky glare, and soon the whole horizon seemed on fire, we knew what it meant, we were to encamp or rather to bivouac in those fields, which were a foot deep with snow. As we drew near, the light became more distinct, and our last hopes vanished. At last came our turn, we piled arms, our muskets sinking deep in the snow; the promise of rations had been a deception, the men had neither meat, nor bread, nor fuel; cries of anger and woe were heard in the adjoining fields, we were as near despair as men could be, but our duty was plain, it was for us to set an example. I called my brave sergeants, whose unfailing good humour had done so much to keep up the spirits of the others, and we set to work to clear away the snow. The Quarter-master went and unfastened one of the large hurdles which enclosed the fields in Anjou and Maine, and dragged it into the camp. After many efforts, we got a few half-dry sticks to blaze, and we were soon seated on the larger pieces of wood around the fire, few amongst us could sleep. We passed the night in as much cheerful conversation as we could; it was the only way to avoid being overwhelmed with sadness, for the moment the sound of our voices ceased, we heard on every side, the wailing of the weary and the deep hollow coughs of sick, broken every now and then by the wild imprecations of despair.

"The want of food and drink had deprived all of the power of rallying."

Yet these men were fighting not on a foreign soil, far from their resources, but on their own ground in their own country, fighting for their homes and their families. We read a description of the death of the Duke de Luynes, the largest territorial proprietor in France, and his brother, Paul de Chevreuse, both simple volunteers, rifle in hand. All that fair country which was drenched with the best blood of France, in the contest on the Loire, had belonged to their ancestors, and was theirs still for the most part. The forest of Marchénoir had been their father's favourite hunting resort, and like the knights of old they fell, one never to rise again, fighting with their own men on their own land. Unlike the volunteers of Paris, these volunteers of the Loire, were anxious, desirous of knowing their duty, and doing it, and gallantly and manfully they did do it, but how can an army be improvised? How leaven 300,000 men with 4 regular regiments, 1 regiment of cavalry, and 1 battery of artillery? There is not a greater warning in all history of the impotence of gallantry and devotion, combined with ignorance, when opposed to knowledge and organisation.

While the attempt was thus being made to place large armies of untrained men in the field, bodies of irregular troops, termed *Franc-Tireurs*, were employed largely in France; these bodies did much real service. They harassed the Prussian advance, kept the enemies' cavalry from advancing, and when employed in fortified places did much good work. It would seem as if irregular troops were better fitted for irregular fighting than for the steady action of large armies, where the want of knowledge of details, their absolute incapacity for manœuvring, and the fact of their being quite incapable of taking advantage of the successes they achieve, render their exertions almost nugatory. It has generally followed in war that these bands do more good when scattered and acting independently than when massed. The history of the Peninsular War shows the same phase of war, but such bands can never make any sensible alteration in the final result. They simply brought great suffering on the inhabitants, who were punished by the Prussians if a band of *Franc-Tireurs* did any damage; thus the villages were burnt, and the chief inhabitants shot, if it was found that a band of *Franc-Tireurs* had been harboured in any way—the consequence was, that the country people were opposed to them.

The siege of Belfort is a good example of the value of such bodies. These bodies defended the villages round that fortress, converting each into a strong post, and compelling the Germans to attack each village almost as if it were a fortification. Wanting ammunition, they cast their own shells, and made their own cartridges, and kept Belfort in French hands until the close of the war.

A German writer, speaking of the effect of these *Franc-Tireurs* on the German Cavalry in the later stages of the war, tells us:—

"In the tiresome campaign on the Loire, the cavalry divisions lay for weeks in front of the enemy, so as to ensure some rest to the

"infantry, much exhausted by the numerous sanguinary fights. The cavalry patrols, worked in broken ground, with a steadiness and determination for which the French so often expressed their admiration, as, notwithstanding their vanity, they still retained a spark of justice. And how much was our cavalry harassed by the bands of Franc-Tireurs, fully organised after October, and carrying on a dangerous guerilla warfare in the country about the Loire, and to the north of it; how many heavy unmerited losses did it endure, yet it wearied not. It was, however, often quite necessary to attach infantry to it, to hold small posts, or to enable it to cross certain tracts of country."

They further destroyed the railways and telegraphs in rear of the Germans, blowing up tunnels and bridges. But the Germans checked this by an exercise of power hardly in accordance with the laws of war; they invariably burned the adjacent villages, and shot the chief inhabitants, thus compelling the unfortunate French people to protect their lines of communication. As an example of this we may instance the bridge near Nancy, the Franc-Tireurs destroyed it; the Germans burnt the adjacent village, shot the chief inhabitants, levied £400,000 on the Province of Lorraine, and compelled the people of Nancy to repair the bridge, the Prussian Prefect issuing the following notice:—

"Nancy, 23rd January, 1871, 4 P.M.

"The Prefect of the Meurthe sends the Maire of Nancy the following order:—

"If to-morrow, the 24th January, at 12 noon, 500 workmen from the workshops of the town are not at the railway station, the foremen first, and a certain number of the workmen next, will be shot." These were no empty threats, and the action of the Franc-Tireurs was really confined and hampered far more by their own countrymen than by the Germans. There being this great difference between the guerillas of Spain during the Peninsular War and these Franc-Tireurs, that the former operated in a thinly-peopled, poor mountainous country, the latter, in a fertile, rich, populous country; in the former case, the people had little or nothing to lose; in the latter, much.

I have been, perhaps, tedious in describing the real state of the French Army at this time, but I have done so because I am desirous of combatting two statements that I have often heard made, as being deducible from the war.

One of these statements is—

"That, because the French Mobile were unsuccessful, therefore our Militia and Volunteers are useless, and not to be relied on."

Now, I think if you consider what I have told you, you will see that, far from this being the case, the ill success of the Mobile is really an encouragement to our Militia and Volunteer Officers.

I am quite prepared to admit that, when two Armies meet, other things being equal, the worse trained men must yield; it is as absurd to expect untrained men to stand up before regular trained warlike troops, as at would be to expect one of us to stand up to a professional

prize-fighter. But, if you look at the Mobiles of France, and compare them with our Volunteers and Militia, you will find that the latter are infinitely superior to the former as a fighting body. They have been in existence for many years; they are organized, officered, and trained. Their cadres contain, not only many regular Officers, but many, very many other men who have a large amount of military knowledge. They have been accustomed to act together; to act with regular troops, more or less; and have confidence in themselves. To say that, because the French Mobile were beaten by the Germans, therefore our auxiliary forces are useless is, I think, a statement based on an entire misconception of the case. Our Militia and Volunteers are, as fighting bodies, immeasurably superior to French Mobile. They have received a far greater amount of training, although their training and organization falls short of what would be required to meet veteran troops.

Therefore, the first conclusion which, I think, we can fairly draw from the recent war is, that our auxiliary forces should not be depreciated, but that, looking to what the Mobile did accomplish, and the far more efficient state of the auxiliary forces, we may fairly conclude that they would prove most valuable troops.

Another statement I often hear made is that, in case of war, our Militia and Volunteers would have the support of the regular Army, and would not be compelled to meet a hostile force alone, or almost alone. Now, this statement is one which, I think, the recent war entirely disproves. At the beginning of July, 1870, there was a motion in the French Assembly, somewhat similar to a motion we often hear in England, to reduce the Army by 10,000 men. The Foreign Minister was appealed to, and said France was at profound peace, and need anticipate no war. The Finance Minister said, the country would benefit by reduced taxation, and so the Army was reduced on the 1st of July, 1870, by 10,000 men, and yet, on the 15th of October, 100 days afterwards, the regular Army of France was only four regiments of infantry, one regiment of cavalry, and six guns.

It is not very long ago since a very able lecture was given from this place, by a very clever man, Mr. Vernon Harcourt, who rather laughed at military men for suggesting the extraordinary developments which should place this country in a situation to be invaded. But does not the history of those 100 days show that the military men were not so far wrong, and that the past, from which alone we can judge the future, points to the military rather than the civilian conclusion. It would be quite foreign to the scope of these remarks to do more than generally indicate how such an event could happen. But anyone who looks at a map of the world, and sees the vast extent of country shaded red, or British territory, and thinks that the whole of that great empire has to be defended, may easily conceive how the absence of the English regular Army may throw the defence of the country on her Militia and Volunteers. We are told this is "impossible," but this would have been exactly the answer all Frenchmen would have made if, at the beginning of July, 1870, they had been told, in fourteen weeks France must trust her honour, her safety, her position, and her wealth to her untrained Mobile. I, therefore, say that

such a contingency cannot be ignored, and that every Volunteer, every Militia Officer, must remember that some day he may be called on to command his men in presence of veteran troops; and let him remember that the greatest gallantry, the most noble devotion, will not then compensate for lack of knowledge.

I have already said that there is a strong tendency, in every profession, to run in grooves, to despise outside opinions, to consider that wisdom can be found nowhere but in a magic circle of a few experts. We all know how this feeling acts in producing trades unions, and we know how naturally this feeling is fostered by those unions. Now, in Prussia, I believe such feelings exist quite as much as they do in this country. But, in the Army, they are not to be found, because the fundamental principle of universal military service bends all the talent of the country to one object; directs all the intellect of the country to one aim. There can be no jealousy of a profession where all meet together on the one common standing-ground of universal military service. And this is the great value of that institution.

In every profession there are a vast number of questions which can be best decided not by a knowledge of technicalities, not by a knowledge of details, but by common sense, guided by extensive general information, and a clear appreciation of what the object in view really is.

In many cases a man so endowed will give you a better opinion on the general bearings of a question than the mere expert. As an instance, I may quote the opinion expressed by Stephenson about the Suez Canal. Stephenson, and all his family were railway engineers, they had succeeded the race of canal engineers, who headed by Brindley, had made most of our inland navigation; and had impressed on the workman who excavates earth, the name he now bears, "navy" from navigator. Stephenson's mind ran in a railway groove, all his life he had maintained the railway against the canal, and he could not appreciate the value of any other mode of communication. He failed to appreciate—great man, great engineer as he most undoubtedly was—he failed to appreciate the value and feasibility of the Suez Canal. A worse engineer, a man who knew less of railways, more of general questions, would have taken a different view. Such is very often the position of men who are experts.

In Europe there were many Armies with great traditions, and histories, great schools and colleges, where war, and all the sciences embraced in that word, were worthily taught and carefully studied. But, gentlemen, who first adopted the breech-loader, was it the Austrian, the Russian, the Frenchman, or the mechanical Englishman? No, it was the Prussian, and he would have never done so were it not, as I have already said, that the Prussian Army contained all the talent of the country, was above prejudice, above tradition, above that precedent, which does a wrong thing because it has been done before; but refuses to do a right thing because it has not been done before. Now, here I see one of the great advantages of the non-professional, irregular soldier. Look at what the military state of this country was fifteen years ago, look at it now. How many minds have

been devoted to military subjects during those fifteen years, minds free from previous bias, minds in short, which have brought general knowledge and information to bear on military subjects, have started theories and ideas, many absurd I grant you, but many containing valuable and useful matter, and the arguments, disputes, and conversations, that have followed the consideration of these theories, have compelled the people of this country to turn their attention to military matters. This is the great boon, the priceless boon that we owe to the Volunteer movement. And it is one that all military men acknowledge.

I have referred to Mr. Vernon Harcourt's lecture in this Institution; it is a good instance of what I mean. Would he have ever undertaken the task of proving invasion impossible if the Volunteers had not proved that the feeling of this country, with that common sense which usually distinguishes Englishmen, had not declared such a thing to be possible?

We must follow the lead of other Powers. All nations adopted rifled field artillery, because they largely helped France to conquer Austria. All nations adopted breech-loaders, because they helped Prussia to conquer Denmark and Austria. And eventually we must come to universal military service because other Powers have adopted that most formidable of all weapons.

When a future historian writes, he will say, that if Jena forced universal service on Prussia; if Sadowa compelled Austria to relax her barriers, arm, and trust her people; if Sedan, Metz, Paris, the loss of two Provinces, and 200 millions sterling compelled France to place all her youth in the ranks of her Army, it was the Volunteer movement that gradually paved the way for a similar result in this country. Now, somebody may say to me, you are advocating what you have just deprecated, you are proposing to copy Prussia, and adopt her institutions, institutions which will not suit this country. But I am doing no such thing. Universal military service is neither Prussian, French, nor Austrian, it is the first bond that links men together in societies, *and what is more, universal, compulsory service for home defence, is the statute law of this country.*

There is another point of view from which we learn much from the recent war. It has demonstrated the necessity of many auxiliary services in an army, services of the greatest value, yet those for which the fighting men must not be diminished. These auxiliary services are of the greatest importance; they are often overlooked. People are far too apt to suppose that war consists in a series of fights, but really for one day's fighting there are many of marching, when the safety of the Army may be compromised, not for want of courage, want of skill in fighting, but for want of information, want of food.

We all know the old fable of the lion going to war, accompanied by the camel, the ass, and the hare. Why take all these to war? said the fox. Because I want the camel to carry the plunder, the ass to trumpet, and the hare to run messages. Now the lion was not only a brave soldier, but he was a good organizer—he himself, as best qualified, did the fighting, while the others, each according to his gifts, helped him.

Now we had a most excellent lecture in this Institution from my friend Colonel Wood, on the subject of Mounted Riflemen, which is precisely one of the auxiliary services I allude to. I should be sorry to see one single regiment of mounted riflemen in our regular Army, for this reason. We have a House of Commons that give so much each year for the Army. If a regiment of mounted rifles be raised, it will be raised only by a reduction of the infantry or cavalry. The amount of money annually voted will only give a certain number of men. You can't get the money increased, and you can only get such a useful auxiliary as mounted riflemen by a reduction of other arms. And this system has been going on for some time. Special services and special corps have been added to the Army, but as they are expensive, too often the addition is made at the cost of the infantry and cavalry—the mainstay of the whole machine.

These services are undoubtedly valuable. But we must be careful that the Army does not entirely dissolve itself into an army of special services. And I was very glad to hear Colonel Wood's proposal to convert yeomanry into mounted rifles, which would give a most valuable force, without touching our back-bone the infantry.

When we remember that the recent war proves that 90 per cent. of the killed and wounded, are killed or wounded, not by artillery, not by bayonets or swords, but by rifle bullets, and that this same infantry loses 17 per cent. of its numbers in killed and wounded, the other branches, artillery, cavalry, and engineers, losing but 6 per cent., it makes one very chary of reducing the infantry by one man for any auxiliary service. Yet these services must exist, and forming them without reducing the regular Army—which would be the case if Parliament were applied to—appears to offer an immense field to the valuable exertions of Volunteers and Yeomanry. Let us see how in the two countries, Prussia and France, these services were provided. All these services, such as telegraphs, post-offices, *etappen*, railways, bearers of the sick, &c., are in Prussia provided for by volunteers from the Landwehr. In France, they were provided only by robbing the battalions of men, and reducing the number of men who could pull a trigger. Thus the French army corps never showed on parade anything like their proper strength; the Prussians invariably did. This is no trifling matter, but one of great and vital importance. Nothing is more curious than to look at the returns which show the employment of a large body of soldiers—the number on parade seems so small compared with the total force, yet go one by one through the employed men and the casualties, and you cannot help it, the ranks are positively drained for administrative purposes. Now in this country we have volunteer corps largely composed of Government officials, members of the Civil Service, post-office employés, dockyard and arsenal employés, not one of whom could in war be spared from his legitimate functions.

A country at war is not like a party of gentlemen out shooting. The actual fighting is but a tithe of the strain thrown on the whole State, war tries the weak points of a nation, searches out the flaws both in her civil and military departments. A country at war is like a ship in a heavy gale of wind, everything from keel to truck creaks, strains, and

labours. Government officials, from the highest to the lowest, could not be spared to fight in the ranks; their whole energies would be required in fields of higher importance.

I have pointed out how all the civil and military forces of France, after Sedan, gravitated to Paris, and were there shut up. Now the chief difficulty the French Government in the provinces, when it attempted to organise the Army had to contend with, was the want of military officers, and the entire want of civil officers. There were no treasury officials, no war-office officials, in fact, there was not one person who understood how the complicated wheels of a vast administration could be kept at work, how supplies were to be bought and furnished, for nearly all the arsenals were in the enemy's power.

We all have seen in the newspapers, accounts of the want of maps in France. Now there is a splendid survey in France, and most beautiful maps; of course the plates from which these maps are printed are most carefully preserved, as those of our own Ordnance Survey are at Southampton. But they were preserved in Paris, and when Paris was blockaded, these plates were all shut up too. Thus no maps could be got, until such stray sheets as existed in offices in the departments, could be photographed and copied; thus in the heat of war, the country had to form a great map establishment, and many of the sheets had even to be sent by balloon from Paris.

Hence the Government had to get officials where it could; had to seek them from amongst railway managers, manufacturers, and promote to high grades and responsible positions, men utterly untrustworthy, the result was, that partly from ignorance of the duties they had to perform, partly from other and worse causes, the contracts made for the unfortunate armies of irregular troops were costly to the country and destructive to the efficiency of the troops. Boots with pasteboard soles, shoddy cloths, cartridges that would not fit rifles, artillery that burst, were issued, and issued so late that bad as they were they were of little use. A country at war, less than at any other time, can afford to dispense with its trained confidential servants. As for our arsenal and dockyard corps, they would have to work night and day to produce, not to expend warlike stores.

I often hear it proposed to form the railway employés into corps of Volunteers; now this was done in France—able, powerful men, under a certain amount of discipline—it seemed as if these men, with their Officers, were the finest material that soldiers could be made out of. But what was the result? We read in the pages of Jacquin, the manager of the great French Railway de l'Est, that this crippled the railways to such an extent, that the movement of the troops, the sending up of supplies, was so interfered with, that the country lost far more than it gained. Accidents frequently happened, the stations being worked by old men, women, and boys. Hence, under the new French law of recruiting, railway officials are specially exempted from being called on to fill up the ranks.

But there are certain branches of the State Administration that can largely help an army. I allude to the Post Office and Telegraph Service.

During the Autumn Manœuvres, we had many of the Post Office Volunteer Corps doing in their uniform the legitimate proper work they should have done; such men are too valuable to put in the ranks to pull triggers. You may get others to do that, but you cannot get men to do their work at a moment's warning. I was particularly glad to see the Post Office corps working in this way, it is a step to utilizing the Civil Departments of the State for defence by making them work conjointly with the Army in their own proper sphere. If the Post Office corps had not done this work, sergeants of the regular Army would have had to do it, and you would have then had the regular sergeant doing Post Office work for which he was not trained, and the Post Office official doing soldier's work for which equally he was untrained—an interchange of duties which benefited neither, and would have injured the public service.

There is another duty for which I think Volunteers are admirably fitted, and which opens up a vast field for useful military action, both direct and indirect.

It is well known that nothing breaks up a battalion so much as taking wounded men to the rear; a shot comes in, a man is knocked over, at once three or four men pick him up to carry him off. If the fire is at all hot, these men often make an excuse not to come back again; thus each shot really deprives the battalion of not one but several rifles. It is impossible to prevent this, unless there be some means provided for removing the wounded. In Prussia this is done by special companies of volunteer Landwehr men, who are specially selected for the purpose, and who, to the number of about 500, are attached to each army corps; these men are usually men who have served eight or ten years, and are consequently about thirty years of age. It is their duty to go into action and remove the wounded; thus no man who is in the ranks is allowed to fall out on any pretext, but the wounded man is removed by the bearers, who are combatant troops specially detailed for this duty.

This dangerous and not over-pleasant duty is admirably performed, and contributes much to the steadiness of the Prussian troops.

In such services as these, where intelligence, courage, and skill are especially needed, and the action of which so much aids the fighting troops, there is great scope for the beneficial action of irregular troops.

In the early stages of the recent war, when the French Army was entirely distinct from the French nation, it is astonishing to see how little aid and assistance it received from the people, and how much of its strength was frittered away in the performance of duty that in the Prussian Army was done by semi-civilian agency. We find within ten miles of Metz, in a thickly peopled country, troops losing their way; and the same thing happened repeatedly. It appeared as if the French people were distinct from the army, and wished in the contest that was being waged, to be neutral.

On the Loire, when troops were away from their own localities, they frequently not only met no assistance from the peasants, but the latter, to avoid incurring the anger of the Prussians, actually gave the latter more help than they did their own countrymen. We read: "We

"were ordered to Brou. Several times on the way we fancied we saw Uhlans; we were mistaken; but the Uhlan is in the air, one has only to hear the peasants talk of them.

"When we reached Brou, the chief magistrate informed our Major that the citizens had no intention of defending themselves. We found in the town hall £600 worth of bread secreted; our indignation knew no bounds; it was evident that these stores were not intended for us, since French troops were neither expected nor desired in the town. We found out afterwards that 12 Uhlans were quietly at supper 500 yards off; in such cases the country people are very careful not to give the alarm, knowing that the enemy would return in force and burn down their houses."

We learn, therefore, from the recent war that, somehow or other, the army in a country must be part of the nation, must strike its roots deep down into the nation's heart; that it must be connected with the civil population of the country at every point; that the feeling, the hopes, the fears of the country must all strike similar chords in the army.

That there must be some means of drawing on the talent, knowledge, and ability of the civil population; that there must be some means of getting enlisted for the defence of the country the peculiar technical knowledge that so many civil professions possess, knowledge which is so useful to the army; that there must be some means of uniting the army to the country; this, gentlemen, I conceive, is one of the peculiar functions, I would rather say the peculiar missions, of the auxiliary forces.



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THE MILITARY SYSTEMS OF FRANCE AND PRUSSIA IN 1870.

A LECTURE DELIVERED AT THE ROYAL UNITED SERVICE INSTITUTION.

(Authors alone are responsible for the contents of their respective memoirs.)

LECTURE.

Friday, May 12th, 1871.

FIELD-MARSHAL H.R.H. THE DUKE OF CAMBRIDGE, K.G., G.C.B.,
&c., &c., Commanding-in-Chief, President of the Institution, in the
Chair.

THE MILITARY SYSTEMS OF FRANCE AND PRUSSIA IN 1870.

By Capt. C. B. BRACKENBURY, Royal Artillery.

THERE are certain little reddish-brown insects called Amazon Ants, which may be seen on fine summer evenings, after sunset, marching in serried columns to the attack of neighbouring nests. They are very brave; their discipline and knowledge of the art of war are wonderful, so also is their strength, when compared with the size of the little bodies which can perform such marvellous military feats. The invaders press steadily on, and attack with a world of resolution the nest of their chosen enemy. In vain do the warriors opposed to them resist their determined onset. Many are killed on both sides, but the result is almost always the same. The Amazons succeed in overcoming all resistance, and enter the dwelling places of the beaten foe. They run swiftly through galleries, and peer into every corner until they have found the intended booty; then issue forth and wend their way homeward rejoicing, each one carrying very gently a nymph or larva forcibly abducted from the nest. Arrived at their own hill-fortress, they deliver the load to ant slaves, who tend the soft living creatures committed to their charge with the greatest care and kindness. As the captives grow up to ant stature they become the slaves of the conquerors and perform all the duties of servants. They become builders and repairers of their masters' houses, provide them with food, and act the part of manufacturers and tradesmen in the colony. But mark what happens. Bye-and-bye the Amazons become so lazy, luxurious, and unhelpful that they are no longer fit even for war. They can neither build ant-houses nor find ant food, nor even take charge of their own young. If their old nest is destroyed or becomes unservice-

THE MILITARY SYSTEMS OF FRANCE AND PRUSSIA IN 1870. 3

able from age, the slothful soldiers have no spirit to decide on migration, no energy to carry it into effect. Their antships are above all that sort of thing; so the slaves prepare the new house, and, when it is ready, carry their degenerate masters to it in their mandibles, just as they themselves were originally carried from their old homes. Hubert captured some of the masters and gave them food. They would not raise it to their mouths. Almost in despair, he bethought him at last of putting a slave in among the perishing warriors. In a moment she comprehended the situation, and set herself to clear away the dead and feed the dying. They received her attentions graciously, and permitted her to save the colony. Now, as these slaves are workers but not fighters, are, in truth, somewhat faint-hearted people in the presence of danger, there can be no doubt what would happen if the once mighty nation were invaded by a host made of sterner stuff and yet uncorrupted by luxury.

The fate of these insects—the same creatures as were chosen by Solomon to represent the type of industry—has again and again, in the world's history fallen upon great nations, and yet men can hardly be persuaded that it will inevitably happen under the same conditions. Lord Bacon, one of the wisest of mankind, writes,—“In the youth of a state, arms do flourish; in the middle age of a state, learning; and then both of them together for a time; in the declining age of a state, mechanical arts and merchandize.” “When a warlike state grows soft and effeminate, they may be sure of a war; for commonly such states have grown rich in the time of their degenerating; and so the prey inviteth and their decay in valour encourageth a war.” Great is the power of money, and none know what that power is better than the vast majority who are scantily provided with gold. But money can neither buy brave and honest hearts nor make up for the want of them, and a time of crisis is sure to come when these and not gold will be found to be the true wealth of a nation.

I shall presently have the honour of laying before you some details of the particulars in which I conceive that the Prussian military system is, and has long been, superior to that of the French, but they are to be regarded only as the inevitable results of great differences in principles. Prussia is poor, but her people, the greater number of whom have to wring a scanty subsistence from an infertile soil, are frugal, temperate, and not given to the softer vices. They are more hardy than the French on an average, their Royal House and aristocracy have been taught in the school of adversity. From the time when Frederick bribed and even kidnapped giants to make grenadiers and husbands withal, the main design of Prussian economy has been to breed men with bodies and brains; then, having got them, to make the best use of them for the benefit of the country. Wherever you search in Prussia, in office, factory, University, or Army, you will find the same ever present virtues—simplicity, organization, and discipline. But above all, every man in Prussia, from the Sovereign to the “boots” at an inn, has been taught and encouraged to think for himself. This is especially true of the Army and its Officers, the result being the

production of a group of men in high military command, possessing, each one of them, sound soldier-like qualities and brilliant talents. The people do not always like these men; indeed, there is a good deal of dread mingling with their feelings of respect, but then the respect is genuine and hearty. They know that the leaders of the nation in war are masters of their profession, and not a chance nor a life will be thrown away. Therefore they go forth to fight without murmuring, though somewhat sadly; therefore their discipline is perfect, for who would dream of cherishing rebellious feelings against men in whom alone confidence may be most worthily reposed? Above the heads of the Generals is a Royal House, whose members are among the hardest working and most respected human units in the German empire. In the constitutional struggles over Army organization, the people and the Parliament learned the strength of the Prussian King and his Minister, so that they were not unready to give praise when the measures they had resisted were found to have prepared the successes of 1866 and rendered possible at last the dream of ages,—the highest hope of patriots,—the unity of Germany.

Only one nation stood between the Germans and their object. Russia was open to an arrangement; Austria wanted nothing but to be let alone for awhile, being too much occupied with internal affairs to interfere in Europe. England had plainly declared her policy to be that which Prussian writers are rather too fond of calling one of effacement. The minor powers could do nothing but tremble at home, and watch events. Only France was determinately hostile to German unity, so France was the declared enemy of the German people. It mattered little how the rupture was to come. Nothing was better understood on the continent than that Europe was too small for the pretensions of the two great rivals, and that sooner or later there must be war between them. They were both preparing for the inevitable shock, and we will now glance over their methods of preparation.

The military organization of Prussia,—and all North Germany had to constitute itself on the same model,—is that which has been often called arming the nation. In one sense the expression is true, but it would be very apt to lead us astray, unless we mark how very different was the armament of North Germany for war from that of Switzerland, America, or the curious condition of helplessness in which some writers and speakers would have placed England at the time when the Volunteer movement was most popular. What these gentlemen wished to do was to substitute armed masses for an army. What the Prussians have been doing since 1807 was to bring the whole nation into the Army. Bear with me while I recapitulate briefly the steps trodden by the great men who have made the German army what it is to-day.

By the terms of the peace of Tilsit in 1807, Prussia was reduced to half her former proportions, and less than half her population, while she was bound to diminish her army, and never keep under her standards more than 42,000 men, her reduced population being only about 4,000,000 souls. The King entrusted the re-organization of the military forces to Scharnhorst and Gneisen, who commenced by abolishing

the old slave-like system of "discipline," falsely so-called. The penal laws were altered; flogging abolished for all men who had not sunk into a second-class; a feeling of personal honour was inculcated among the soldiers. No man could become an Officer until he had learned the duties of the private soldiers, passed two examinations, and been elected by the corps of Officers to take his place among them. All allowances for birth were abolished, and every encouragement was given to those who would cultivate scientific pursuits. The men were allowed under certain conditions to go on furlough, after a service of some months in the ranks, so that others could be trained, and so large a proportion availed themselves of the permission that in 1813 all the regiments could be brought to their full strength, and 51 new battalions formed. By the addition of 10,000 Volunteers, and the establishment (on the 17th March, 1813) of an enthusiastic but inexperienced Landwehr or Militia, numbering 120,000, Prussia was enabled to put in the field when August came, a force of 250,000 fighting men. But how different were these from the men of 1870! Enthusiasm there was in abundance, but even later, in 1815, they had not attained the solidity or steady discipline necessary for great achievements. They were unsuccessful at Ligny, and Wellington reported that though the Prussian Army started with double his force, by the time they reached Paris he was as strong as they were, although he had received no reinforcements, and they had not lost many in battle. But their discipline was so relaxed that their numbers rapidly diminished during the march. The system of individual plunder had been the ruin of the French Army, and would be the destruction of the Prussian. Clearly this was not a force fit to take military command of Europe, as the German Army has now virtually done. Not yet had the country rallied sufficiently from the weakness into which it had been led by the pedantry of those who had contented themselves with embalming the corpse of the dead system of Frederick. A good Army cannot be formed suddenly any more than, being good, will it remain at the same point. It must breathe the same air as the nation, and live the same life, or it can never fulfil the wants of the nation when the hour of crisis arises. No degenerate nation can possibly have a trustworthy Army.

Though not perfectly satisfactory, the landwehr men had shown that they could fight. Since Prussia was poor, and even after the restoration of territory consequent on the general peace, had a population hardly reaching ten and a-half millions, it was decided to base her military system on this principle, that the standing Army should be only a school through which all men capable of bearing arms should pass, but that the Landwehr should form the bulk of the troops brought out for service in case of war. Called to the standards at the age of 20, each Prussian had to serve three years in the standing Army, two in the reserve, seven in the first ban of the Landwehr, and seven in the second ban. Even then he was liable for a further period of ten years, to be called out as a member of the Landsturm, in case of emergency. Let us mark this carefully. The standing Army with its reserves held

the Prussian only five years. He remained in the Landwehr 14, and in the Landsturm 10 years. The standing Army was considered only as a sort of training school, and the first ban of the Landwehr was just as much a part of the field Army in war as the standing Army itself, though intended to form the depôts from which the troops in first line were supplied.

Now it is a remarkable fact that most persons who talked and wrote about the Prussian successes in 1866 imagined the Army to be composed and trained in the manner just related. But it was not so. The wars of 1848 and 1849, and the mobilizations of 1850 and 1859, showed that the spirit of the Landwehr was not to be trusted. Trusted it might probably have been in a war against the natural enemy—France, but not for the grand struggle for supremacy in Germany. Besides this, the population had increased so as to be able to furnish an annual contingent of 63,000 men, instead of the usual number taken, namely 40,000. The present Emperor of Germany, while regent in 1859-60, ordered that a re-organization of the Army should take place, adding to the numbers drawn every year into the standing Army, and shortening the term of service in the Landwehr, while lengthening that in the reserves. The recruits were therefore increased by one-half, and had to serve seven years before they were clear of the standing Army. The Landwehr were to serve for seven years only, and the first ban was no longer to form part of the field Army, but to be placed in garrisons, together with some of the reserves. By such means the standing Army would become about 500,000 men, and the temper of the Landwehr might be disregarded. Englishmen are not likely to forget the constitutional struggle which arose on these questions. The Parliament would not grant the powers demanded by King William when he placed before them in 1860-61 the plan of his new law. By what process the denied boon was taken matters not now. The fact is that step by step the standing Army was increased by 36 infantry regiments, 9 fusilier battalions, 10 cavalry regiments, 9 companies of garrison artillery, 18 pioneer companies, and 9 battalions of military train. Henceforth the Landwehr was no longer the great institution of Prussia, and only the younger men belonging to it were called out at all in 1866. The changes were not made without much indignant opposition, and there can be little doubt that any failure in the war against Austria would have cost the King his throne. Men are not yet so changed by civilization as to have lost their admiration for military success. Philosophers may think and write as they please. They cannot deny that the Prussian Parliament forgave King William all that he had done contrary to the law, because he had given them military glory.

No sooner was the question of Prussia's supremacy in Germany settled, than her wise rulers set themselves to the task of Army Reform, strange as it may appear that reform should be necessary after such great achievements. But the new provinces had to be organized, and, besides, the increase of the standing Army of Prussia and the reduction of the Landwehr, had introduced some confusion in the rela-

tion of the Line regiments to their Landwehr battalions, and their districts for recruiting. The increase of population had not been the same in all the districts. Railways, too, had revolutionized the system of communications, and it was necessary to bring the whole machine into a condition for harmonious action. The first step was to redistribute the country into districts, so numbered and arranged that each *corps d'armée* and regiment should have its particular district corresponding with the civil divisions of the country. The regiment is scarcely ever moved from its own district, and it naturally follows that the Reserves (men on furlough) and Landwehr battalions belonging to the regiment are on the spot and ready for instant mobilization. Thus the whole North German country was divided into twelve *corps d'armée* districts, and each of these was divided into four sub-districts, corresponding with the four brigades of the corps. Then the sub-districts were again divided into districts of Landwehr battalions. There are generally two Landwehr battalions to each regiment, so there are, as a rule, four Landwehr battalion districts within each brigade district. We shall see presently how the whole machine works for recruiting and mobilization.

On the 9th November, 1867, a new development of the Prussian military system took place, including this time the whole of North Germany. The main features of the law were as follow:—

Every North German, with the exception of a few specially exempted classes, was liable to serve for the help of his country in war.

The armed force of the Confederation comprised first the "standing Army," divided into Active Army, Reserve, and Landwehr. Here it is to be remarked that the Landwehr is no longer a Militia, but part of the standing Army. The second division of the armed force was the Navy, comprising the Fleet and the Seeweher. The third division was the Landsturm.

Like all the rest of the Army administration, the Budget is characterized by the most extreme simplicity. The active Army may by law amount to 1 per cent. of the whole population of the country, and the money required is estimated at 225 thalers, about £33 15s. per head of the permissible active Army. The law granting this money is voted for a number of years, so the War Minister has only to estimate the population, divide it by 100 for the number of men serving, and then multiply by 225 to get the figure representing the number of thalers he has a right to take out of the public revenue for the year. For any extraordinary expenditure, such as re-armament of artillery or infantry, coast defence, &c., he goes to Parliament with a supplementary Estimate. If the money is refused, he can take any accumulations in the military chest, or he can dismiss men to their homes some months before their three years' service with the colours is over, or, finally, he can take fewer recruits for the year. Thus he has far more power than is granted to any Minister in England, France, or Austria. He does habitually, and for the whole Army, what Mr. Cardwell did last year when he asked for 20,000 additional men, and estimated his money

requirements at £2,000,000, or £100 per man. But there is this difference, that the North German Minister can get exactly as many men as he wants—no less and no more—whereas Mr. Cardwell had no certainty as to how many he could really find. I will now try to sketch shortly the process of recruiting in North Germany, and I cannot but remark that the system seems perfectly possible to be adopted in England, always excepting the forced service, and even that is possible for the Militia.

In each corps district, the Corps Commander, together with the President of the Civil Government and his chief officials, form a Commission. In each brigade district is an inferior Commission, formed from the Brigade Commander and the civil official of corresponding rank. In each "circle," or Landwehr battalion district, is a still lower Commission, formed by the Landwehr Commander and corresponding civil official, or director of police, together with extra members, namely, an infantry Officer, four landed proprietors (two of country, two of town property), and a Staff Surgeon, the last having no vote. Above all, there are Commissioners specially appointed by the Minister of War and the Interior.

Before the 15th of April in each year, the Minister of War receives reports from the provinces, stating the number of men required to complete each regiment, &c., and he issues in return his directions as to the number of recruits he wishes to have called up both for Army and Navy. Then the various Commissions above named decide whether each small Landwehr district can supply the proper number. If not, the deficiency is made up from the other districts of the same brigade. But there are generally more than enough, in which case lots are drawn among those liable for the year, and the youths drawing the highest numbers are put back into the Ersatz Reserve, and are liable to be called at any time to make up deficiencies.

But how are all the men of proper age brought together and selected? We shall see. In January, the clergy and officials in charge of registers send in lists of all youths who have reached 17 years of age. The young men have to present themselves to the local civil authorities before the 1st of February, and alphabetical lists of their names are made. They now begin to be liable for the Landsturm; or they may, if they like, become "one year Volunteers." This is the part usually chosen by young men of education, who do not wish to become Officers in the active Army. By volunteering for one year, providing their own equipment, and passing two examinations, they fall into the Reserve at 18 years old, and remain in it for six years. They have the right at first of choosing their own regiment. In peace they need not join their regiment before their 23rd year, but they must pass their examination before their 20th year. Those who do not volunteer are dismissed to their homes, but called up again in their 21st year, examined medically in May or June by the circle, or lowest of the commissions, and divided into classes. Some are rejected or exempted for various reasons, others held over till next year, and upon the rest the commissioners make remarks as to their adaptability for

special branches. Then come the brigade district commissioners, accompanied by the adjutant of the brigade, an Officer of the Guards, and a surgeon.

There is another medical examination, after which the guardsman selects any one he chooses for service in his corps, which is supplied indiscriminately from all districts. Men not taken into the service for any reason, yet not rejected absolutely for all military duty, both in peace and war, fall into the Ersatz Reserve, whence they are liable to be called in case of war as recruits for the Reserves. The recruits have some of the articles of war read to them, and are henceforth under military law, though they do not join until October. If they have lost work by their selection for the Army, they can claim the right to join the standards at once, if they please. Then come the three years (often reduced by several months) in the active Army, four years in the Reserve, and five in the Landwehr, after these the Landsturm, till 42 years of age. During the four years' service in the Reserve, the men have all the freedom of civilians except that they are bound to take part in two manœuvres, neither of which may exceed eight weeks. During the Landwehr service they may be called twice for a few days' drill. A man who wishes to re-engage for a further period after the three years' active service, may do so if his Colonel consents, and he himself has shown a probability of his becoming a non-commissioned Officer. A slight addition is made to the pay in such cases, and nearly all the subordinate posts in the Civil Departments are open to non-commissioned Officers, who have been re-engaged and served altogether 12 years. They have the preference over civilians, but must pass an examination, if required. The one year volunteers are examined after their year of service, and receive certificates stating whether they are qualified to be Officers, non-commissioned Officers, or privates in the Landwehr.

As the cavalry training takes longer than that of the infantry, great inducements are offered to young men to volunteer to serve four years instead of three in that branch of the service. Such are not called out for manœuvres at all while in the Reserve, and have only to pass three years in the Landwehr.

The Reserves are principally officered by gentlemen who have held commissions in the active service. A few soldiers, who have distinguished themselves by personal bravery before the enemy, and a few others who have received certificates from their regiment as to their military and *social* qualifications, are appointed Officers of the Reserve. Similarly the Landwehr is commanded either by old Reserve Officers, or by promoted men of the Landwehr, who have passed examinations, served with and received certificates, military and social, from a regiment of the line. This necessity of being elected by a regiment to the position of an Officer, no matter what examinations may have been passed, is a great feature of the Prussian military system, and extends, as a principle, throughout the whole service. When a candidate has been so elected, the "guinea stamp" has been put upon him, showing him to be not only good metal, but up to a certain standard. No inconvenience is found to result from it, and I would venture to ask whether some such

principle might not be adopted with advantage in England. It is agreed on all hands that Officers should be gentlemen. There are some who fear for the social tone of the Army when purchase is abolished. Would not election in addition to examinations secure all that is wanted? The chief difficulty would be the want of connection between districts—counties, if you please—and regiments in the modern English service, but both principle and expediency are against the continuance of the no-how system of recruiting, and I believe that its end is near at hand. If regiments were really localized, and passed their home service always in their own districts, one difficulty at least would be removed from the path of the Minister of War who does not now even know how to find recruits at all.

See now to what point we have got in the Prussian system. A certain district of the country contains its own corps complete as an army in every respect. Even each regiment has its district where it lives, surrounded by the friends of the soldiers, together with the reserves which are to reinforce it in war, and the Landwehr, who are to take its place in the fortresses. If a father serves in a regiment, his sons serve there too some day. Family traditions are kept up, and home influences are not denied to the soldier. The Officers are well known throughout the country side, and no one out of harmony can be admitted to the regiment except by carelessness on the part of the Officers already holding commissions in it. Most of the civil posts in the district are before the men as possible rewards for good conduct and cultivation of talents, and in the worst case there is always the old regiment at hand to help those who have passed through it, and since fallen into difficulties. Thus there cannot but be good feeling between the soldiers and the civil population, and the private is never quite out of reach of the tender advice of a mother and the softening influences of home.

One day there comes a rumour that the French Emperor is threatening Germany with invasion. The hearts of the house-mothers die within them, as they think of the gallant sons, who must go forth to do battle for Germany. But there is not a fire-side in the country where the young men of the reserves do not listen to nightly stories of the cruel oppressions of Napoleon the First, or hear how the elder their grandfather marched through the battles in Belgium to the streets of Paris. The first chill of dread is succeeded by a growing enthusiasm, and when it is known that the short command, "mobilize your corps" has come down from Berlin, it is not the boys only who are glad, nor are even the treble voices of the women wanting to sharpen the tone of "the watch on the Rhine".

But there is neither hurry nor confusion—Not a word more from the War Office than "mobilize your corps." Not a word more from the corps commander than "mobilize your regiment." If the telegraph will not reach every regiment or official, mounted men are sent to pass it on. The fiery cross has been uplifted, and the clans gather for the fray.

Every commander of a district Landwehr battalion knows who are

the men to be called out instantly from the reserve: nay, he has in some cases, letters already written and only requiring to be despatched. In other cases he sends the orders through the parochial authorities. Twenty-four hours' law is given to arrange household affairs and take farewell of friends, and then the men present themselves at the headquarters of the Landwehr battalion. A doctor examines them to see if they are fit to fight for their country, and they are forwarded in charge of an Officer or non-commissioned Officer to the headquarters of the regiment where the whole of their equipment is already waiting for them, for it is never suffered that the peace army be considered otherwise than as the training school for war, and the guardian of all that is wanted to equip the war army.

To complete the infantry regiment, about 500 reserve men per battalion, or 1,500 men per regiment are sent to serve with the colours at once. The remaining reserves, together with some of the youngest Landwehr men, are formed into a *depôt* battalion about 1,000 strong; the rest of the Landwehr go to the fortresses, always, so far as is possible, in their own district. A cavalry regiment only requires about 40 reserve men, because it is kept nearly up to its full strength in peace. The bulk of the cavalry reserves go to guard train and lines of communication. I have not time to follow through the details of mobilization for all arms. It must suffice to say that the reserve men left in the *depôt* battalion work at the drills and duties they have as yet had little time to forget since they served with their regiment, and await a call to the front. That call comes as soon as the regiment has lost one-tenth of its men, and comes direct from the regiment, not from any War Office or other cold-hearted institution. "Comrades, we have suffered and need help," is heard by the brothers and friends of the men before the enemy, and the reserves go, not to strangers, but to stand beside those whom they have known all their lives. I am at a loss to conceive what is meant by a good regimental system if this be not one. Officers, every one of whom has been elected into the regiment by those who choose him as a comrade, and men all from the same district, so that there is none so humble but will have his gallant deeds told in his village by eye witnesses—none so friendless, but that the tribute of a tear will be paid to his untimely fall. As I wrote these words I opened an English Army List at a venture, and saw at the head of the two pages the names of six regiments: 36th Herefordshire, 37th North Hampshire, 38th 1st Staffordshire, 39th Dorsetshire, 40th 2nd Somersetshire, 41st The Welsh. Once these words meant something; now they but recall memories of a better time, when the counties of England were proud to send the flower of their youth to the grandest test of manliness—war for the good of their country.

Fain would I linger over this part of the subject, and tell again, as has been told before, how the patriotism of Germany does not stop at the sacrifice of her children, but extends to the furnishing of horses to the regiments or train, at prices fixed by a commission, and not to be paid till the end of the war; how the families of the absent soldiers are cared for by the parishes, not grudgingly, but as a simple duty;

for though in peace a merciful law exempts the only sons of widows, and the chief support of fathers and mothers unable to support themselves, even these must be given as a sacrifice to the inexorable requirements of war; how subscriptions are opened for the sick and wounded, who receive no comforts except freewill offerings, and how the whole district is busy preparing supplies of food and clothing, which are sent straight to the regiment dearest to the hearts of the people. But it is time to turn the page, and see what state of preparation for war France was in when she threw down the gauntlet.

↓ The main feature of the organization we have just cursorily examined, is that it is an organization for war. That which General Gouvion St. Cyr devised for the French Army in 1818 was, as has been pointed out in the prophetic Jeremiad of General Trochu, an organization for peace. Nominally the soldiers were to be recruited by voluntary enlistment, conscription was to supply deficiencies. Practically, almost the whole Army was taken by conscription. The exhaustion of Europe, and especially of France, rendered war highly improbable, and it was not until 1832 that any new law was required for the Army. Then a fierce wordy controversy ended in the law framed by Marshal Soult, a compromise between the two opposite opinions. According to its provisions a conscript might himself find a substitute if he could. The State asked no questions so long as the number of men required were found, and all fit for service. Exchanges were made among friends, perhaps even brothers, but the principle that it was honourable to serve the State as a soldier was not lost sight of. The Officers were gentlemen of rank, accustomed to command, or men who had actually distinguished themselves in war. But Louis Philippe introduced commercial ideas even into the Army, and the laws of 1834-36 made commissions of Officers no longer to be considered as honours held at the pleasure of the Crown, but as property which could not be taken away except for misconduct. Unfortunately for the country the men of good family, who adopted the profession of arms as a career after the Restoration, and worked hard to fit themselves for war, refused to serve under Louis Philippe, and left the Army in great numbers. It is impossible for a just historian not to hold them responsible for some of the commercial spirit which began to surge down upon the Army, and finally crushed all its grandeur and most of its manliness. For if the advocates of high principles break up their ranks and go home because they are defeated, who is there even to delay the onward march of selfish mediocrity? The aristocracy of the country, the natural leaders in time of foreign strife, had left the service. The King discouraged the idea of war and encouraged commerce. Naturally, the best men of the middle classes adopted careers in which fortunes could be made. What could follow but a gradual lowering of the position of Officers. Commissions came to be looked upon not as honourable posts to be held for the good of king and country, but as first steps towards the attainment of decent incomes and social position. It was not long, however, before the Officer, sprung from the lower middle class, found himself and his ideas somewhat out of place in a

profession which is nothing if it be not manly and noble in tone, while he saw his brother, the grocer, making a fortune. Disappointed and jealous, seeing no prospect before him of advancement by war, he began to cast about him for some means of enriching himself by currying favour with men in power. He was not even a free shopkeeper, but a money grubber, who had learned to cringe for appointment to some better post or other, whence he would not be driven if servility could keep him there. Doubtless there were numerous exceptions; these must always be taken for granted in describing the manners of a large class. But on the whole the grand, bold, military spirit, with its unselfishness, exact truth, and nice sense of personal dignity and honour, qualities which go so well with the strictest military obedience, had given place to slavish self-seeking and a dog-like spirit, ready to lick the hand that strikes—but feeds. Not the bravest, the truest, and the best were placed in positions of trust and honour, but those who looked most sharply after their own interests, and knew best how to court favour.

Thus was the Army and the nation gradually prepared for the law of 1855, by which the fall of military service from the high position it had formerly held was recognized. It enacted that men drawn by conscription might buy exemption for a sum of money paid to the State. Instantly agencies sprang up throughout the country, to lend money for such purposes, and a soldier serving in the ranks began to be regarded in a commercial age as a man not only without money but without credit. Frequent promotions from the ranks to the grade of Officer kept down the tone of the commissioned, and the French Army was evidently pursuing a downward career. I am not speaking only from my own judgment, but that of some of the best and most noble French Officers whom I have lately met, and I pray you especially to remember that what I am about to add is not merely my own opinion, but one very common across the Channel just now.

Some forty years ago France became possessed with the desire of having Algeria as a dependent colony, both as commanding the southern shore of the Mediterranean, and as, forsooth, a school of war. At first it was a good military ground, fertile in marches and combats. Certain Officers were noticed for their bravery and skill, and deservedly rewarded. But when French power was once established, the school became a playground, or, even worse—a place of practice for intrigue. Life there was a condition of peace, with the disorder of war, and without sufficient danger to check the demoralising effect of occupation by conquerors. Discipline became lax there, as it did in India under similar conditions, but there came also a gradual sinking into terrible demoralization and vices, which are still called in France “Algerian,” because no one dare otherwise name them. Thus the Army steadily degenerated, and the few men who dared to send forth notes of warning were speedily crushed by popular opinion. Who can wonder that such an Army showed itself untrustworthy in 1848, and proved a broken reed to the hand that leant upon it? When Louis Napoleon became President of the Republic, his first thought was

to gain the goodwill of the Army. It may be remembered that he gave banquets and gratuities to the soldiers, and made his presence among them to be looked upon always as the forerunner of some indulgence or other. But he could not gain the goodwill of the natural military leaders. It was long before they came in at all, and then only in scanty numbers, and with ideas of reform—such reform as was incompatible with the Imperial system, for it involved the gathering tighter the reins of discipline, and the substitution of real work as the only road to promotion, instead of subserviency to the claims of the dynasty. The first step to promotion was to gain the interest of some Court favourite; the second, to be sent to Algeria and perform some feat of arms against undisciplined native warriors, so that the name of the aspirant might be brought before the public. The luxury of the Court became reflected in the Army. The Generals, often risen from the ranks, used their comparatively high resources for self-indulgence. The junior Officers and men followed the evil example as far as their means allowed. Luxury must be comparative, and it is not to be supposed that the pay of the French *militaire* enabled him to purchase any refined pleasures, unless the theatre be considered so; but each one in his own sphere learned to prefer self-indulgence to manly self-denial, and Algerian vices became fatal to all self-respect. The outside appearance of the Army was fair in seeming, but outpost duties, gaining intelligence, and all the severer work of soldiers were neglected. I had military friends in Paris, belonging to armies of other Powers, and I can vouch for the fact that their reports of the condition of things were as unfavourable as those from Berlin were the reverse; and this even after 1866, when France was avowedly preparing for war. The Emperor himself endeavoured to introduce certain reforms in organization and tactics, but the military hierarchy on whose support his throne rested, were not to be easily moved and he dared not offend them. They, like the Germans, considered themselves to be in the presence of an enemy, but unlike the Germans, they despised their antagonists. Nothing can be more fatal, than unreasoning confidence in success, because it seems impossible that one's pride may have a fall, yet this was exactly the condition of the French Army under Napoleon the Third. The lesson has come to them. May they make the most of it, as Prussia did in 1807.

Hitherto we have spoken only of the moral degeneration of the French Army. It is time to enter into some details of the system of obtaining recruits, organizing and preparing them for war. The law of 1832 (Marshal Soult's) was based upon that of Gouvion St. Cyr in 1818. Nominally the recruitment was by voluntary enlistment, practically by conscription. The annual contingent was voted by the Legislature and might vary considerably. The conscript was taken at twenty years of age, served seven years nominally with the colours, but usually in part with his regiment and the rest on furlough in the Reserve, which was further increased by the conscripts drawn each year, but not required to fill up the active army, and, therefore, allowed to remain at home on furlough. The latter class were liable to be called out occasion-

ally for drill, but the call was seldom given. A law of 1831, and a later one in 1851, provided for a mobile national guard, to be drawn from the sedentary national guard to defend the soil of France in case of invasion. It requires little thought to prove that reserves consisting chiefly of young men seldom or never drilled, would be of little use, and the Mobile Guard of still less. The laws were unpractical, and remained dead letters to all intents and purposes, as far as the reserves and National Mobile Guard were concerned. The Army consisted of men, counting about five or six years' service, and of men bribed by extra pay and bounties to re-engage. Seeing that this was no condition of preparation for war, Napoleon the Third began his measures of reorganization by ordering that such men of the contingent as escaped service in the Army, should not go scot free, but pass a few weeks of each year in "depôts of instruction."

For a long time the annual contingent for all services including navy and gendarmes, had been fixed at 100,000 men of whom 79,000 only were really disposable for the Army. By the law of 1832 these would be divided into two portions, one to supply the wants of the Army, which would theoretically require 43,000 recruits, the other portion would go home and have only a slight amount of drill in the depôts. But a new element was introduced into the question by the law of 1855, encouraging re-engagements with extra pay. Many men remained, so that there was not room for the usual number of youths to join. Furthermore, the bad principle of escape by payment of a sum of money, was working so disastrously, that at last, only 59,000 were called each year, of whom 36,000 went home on furlough, 23,000 remaining with the colours. That is to say, that only 23,000 men annually were learning to be soldiers in France. Nor was this all, for the outgoing soldiers were freed on the 31st December, while forms of one sort or another so delayed the incoming of the recruits, that the drill season was over before they joined, and they were, for their first year, useless for war purposes. All these causes combined to reduce the effective of the Army, and that so thoroughly, that in the Crimean and Italian wars, it was found necessary to call up annual contingents of 140,000 men, thereby pressing hardly on the population of the country, and unfairly on those who happened to be of a certain age, while failing to afford soldiers immediately ready for service.

The year 1859 was a memorable one in the military history of Europe. France, after drawing 140,000 men for three successive years during the Crimean war, had nominally an effective force of 639,000 soldiers. Practically all that the Emperor was able to dispose of amounted to 300,000 when the necessary garrisons were subtracted from the total force. At the battle of Solferino only 107,000 Frenchmen could be put in line against Austria, and the result of the battle was much too uncertain for a while to justify Napoleon III in continuing the war, even with Italy for an ally. Something was clearly wrong here. But something was also wrong further north, for it was now that Prussia discovered how cumbrous was the weight of her huge Landwehr force, and how difficult to move. These faults in

system were acknowledged in both countries. In Prussia, as we have seen, the King risked everything to set his army in perfect order, even against the will of the people. But the Emperor of the French lived on the goodwill of the Marshals, and the suffrages of the country classes, always hardest hit by conscription. So the talk came to nothing, and Prussia was allowed gradually to work herself into the position of the first military power in Europe. It is well known that in 1866 the army of France was unfit to take the field, being unprovided with stores for a campaign. Her self-love was wounded, and henceforth the work of re-organization began in earnest.

Marshal Niel is responsible for the law of 1868, which was based on the principle that it is better to have an active peace army of short service men with good reserves than of long service men with no soldiers behind them. Only his influence could have carried it against the opposition it encountered in the Chamber. The shameful action of the State in taking money from a conscript instead of service was abolished, though he might still find a substitute if he were willing to give vicarious service. Bounties for re-engaged men were also abolished, as it had been decided by general concurrence of opinion that soldiers do not become more valuable for war, but less so after ten years' service, and those retained in the ranks fill up places and prevent young men coming in to learn their duties as soldiers. But since good and clever Non-commissioned Officers are always worth retaining, the Prussian plan was adopted of promising civil employment to such as should complete a re-engagement of five years. The term of service for all soldiers was fixed at nine years, only five of which were to be with the colours, the remainder with the reserve. Besides these the reserve took all the men out of 100,000 conscripts who were not required for the active army. But the main feature of the law was the institution of a mobile national guard, consisting of all the men fit for service each year who escaped, by any means whatever, conscription for the regular army, and who were now obliged to give five years' service in the Mobile Guard. They were intended to supply the place of the German Landwehr and Ersatz reserve together; their Officers were chosen by the Emperor chiefly from among the retired Officers of the Regular Army. By making the law retrospective as far as 1864, the men who had escaped conscription in that year now owed two years' service to the State in the Mobile Guard, those of 1865 owed three years, and so on. Thus at once 550,000 men were added to the defensive forces of France, but their fifteen days' drill annually would at the best, after several years, turn out very poor soldiers compared with the Prussian Landwehr men, while the nature of French military organization gave no connection between regiments of the Line and of the Guard Mobile. The latter had, therefore, in it the dangerous elements without the excellent qualities of the Landwehr. What the Mobile Guard actually did was to free the active Army for the field by garrisoning fortresses. They were worse than useless for every field service, and proclaimed their opinion on that point loudly enough when asked to defend the camp at Chalons. In

1870 the reserve was but in its infancy, and many of the men were entirely untrained. Eventually the whole organization would have furnished an army as large as that of North Germany, but not so well trained. In 1870 even men were wanting.

Thus it appears that in time of war France would be deficient in her number of trained men who could be put in the field; but something even worse remained behind. The organization for calling up the Reserves was terribly deficient. A well known pamphlet, attributed to the Emperor Napoleon the Third, states that he himself was aware that France would be out-numbered, for she could only put 300,000 men in line before the enemy at the commencement of the campaign, while Germany could bring up 550,000. To make up for this numerical inferiority, the author of the pamphlet says that it was necessary by a rapid movement to cross the Rhine, separate South from North Germany, and by the brilliancy of a first success, draw Austria and Italy into alliance with France. The only chance of success for this plan was to be quicker than the Germans in taking the initiative. But now appeared the advantage of the German District Corps organization, and the disadvantage of the scattered system of France, and, permit me to remark, of England up to the present day. No example can be better than the one given in the pamphlet. Strasbourg was one of the places named for a great concentration of troops; 100,000 men were to assemble there. Now the town of Strasbourg and the districts surrounding it contained many men belonging to some of the regiments concentrated in the neighbourhood. Surely common sense will show that these men ought to have been able to join their regiments at once :—ought to have been, but were not. Some of the dépôts where lay their uniforms, arms, and accoutrements, were actually in the south of France, and even in Algeria. Instead of the railways being entirely available for a concentrated movement of troops from all quarters, they were partly taken up with the conveyance of men away from the seat of war, in order to bring them back equipped a few days afterwards. The same great mistake, with its attendant consequences, was discovered in the organization of the supply departments. There was much talk about treason, and the breaking down of the Intendance; the truth was that the French people had, previously to the war, been traitors to themselves by their carelessness in not insisting upon a proper organization, with the events of 1866 before their eyes. Furthermore the Emperor, if the pamphlet be indeed his, adds that too little initiative was allowed to the Generals commanding the Departments, and to the Chief Officers of the Intendance. For the smallest matter, he says, a ministerial order was necessary; not even arms could be supplied to the soldiers without an order from Paris. What, then, must have been the pressure and overwork in the War Office? what the distrust and discontent among regimental Officers and men? What at last the despair when, still incomplete and not yet fully organized, the armies of France were caught in the very act of formation?

In all that I have hitherto said concerning the faults of the French military system, not one word has been stronger than those used by

French Officers writing for the information of their own countrymen. The earnest warnings of the veteran and prophet Trochu are now almost household words in England. General Susane, during the siege of Paris, wrote in defence of the French Artillery Corps, which he said had been made a scapegoat by "our sovereign mistress, public opinion." He says that the French Army more than any other army reflects the virtues and vices of the nation from which it springs. I shall take leave to quote some passages from his pamphlet:—

"It is now three years since a general Officer, pre-occupied more with the fate of Rome than that of Cæsar, alarmed like so many others by the terrible storm which he perceived rising on the horizon, unveiled in a celebrated book the wane of the spirit of discipline in our soldiers, and that of responsibility in the Officers of every grade, to the very highest. He denounced the tendency of Government to favour agreeable Officers at the expense of proud and capable ones, and its preference for the brilliant to the solid, which, in a short space of time, led to our having in the higher grades infatuated and absolutely empty heads only, and, in the lower grades, jealous and care-less hearts. He showed with no less independence the dangers of the patriotic illusions as regards volunteers, of the *levées en masse* and other revolutionary legends; respectable legends, no doubt, if the intention only is taken into account, but which have a great fault,—that of being legends only. It is also three years since an experienced, able, and clever Minister endeavoured to show, with the precautions which his political position obliged him to use, the necessity of prompt measures of defence. He demonstrated the insufficiency of our *cadres* and of all arms, sought by the institution of the Garde Nationale Mobile to fill up the terrible deficiency which existed between our military power and that of our probable adversary, and desired, above all, to raise the moral level of the defenders of the country, which had fallen as low as possible, in consequence of a mode of recruiting that brought into the ranks the sons of the most destitute families only—the most indifferent to the honour of France.

"At the same time a statesman, whose clear-sightedness and love of his country no one will contest, and who always separated from his political allies whenever the Army was under discussion, affirmed that, in view of the crisis which Prussian ambition was preparing for Europe, our country could not put her resources to better use than in devoting them to the development of her military organization.

"General Trochu, Marshal Niel, and Monsieur Thiers spoke to the deaf."

Further on in the same work General Susane says:—

"As regards the leaders of the Army, some were not fit to give advice, and could only perceive in the war the opportunity of doing their duty; the others, true descendants of the Knights of Agincourt, of Cressy, and Poitiers, went joyfully forward, full of confidence, not doubting for an instant but that bravery makes up for everything—that a Gaul is worth ten Germans, and certain that amongst them there were none but Turennes, and not a single Soubise."

Such being the condition and general organization of the North German and French Armies, it is hardly necessary to say that the organization, in matters of detail, showed the same talent and steadiness of purpose on the one side, the same marks of carelessness on the other. Yet the ears of the soldiers were tickled, and their confidence in success kept up until the time of trial, by exaggerating the importance of certain new weapons such as Chassepôts and Mitrailleuses. As if it were the tools that win battles, and not the men. Undoubtedly the Chassepôt is a very superior weapon to the needle-gun. I have myself no doubt that the mitrailleuse is a very valuable addition to the armament of a nation, if only it is in the hands of men who know how to use it. I have no doubt, also, that the superiority of the Prussian field guns was immensely exaggerated, and that there would have been little difference in the result had the bronze muzzle-loaders been in the hands of the Germans, and the steel breech-loaders in those of the French. Putting the various weapons together, and striking an average, the French had a decided advantage, which only failed to be of use to them because they were not wise enough to avoid wasting their ammunition, and not sufficiently masters of tactics to place themselves and their weapons in the best positions.

On the subject of tactics a long controversy has been waged for several years between French and Prussian writers. Prince Frederick Charles observed long ago the necessity for giving greater mobility to the infantry than was possible by stiff formation of battalions in line. The French keep the battalion, but give looseness to it by allowing a considerable latitude to the individual soldier. The Prussian way of meeting the difficulty was to divide each battalion into four companies, and make the Captains mounted Officers with as much power of initiative and control over their men as if they were Commanders of battalions. The French method of fighting may be called loose, the Prussian line in a pitched battle is not so much loose as flexible, each formation has its peculiar advantages and disadvantages, both require well trained, intelligent, and highly disciplined soldiers having full confidence in their Officers. The last qualification was present to a high degree in the Prussian Army but not in the French.

There are two more features of the North German system, in which it is clearly and decidedly better than the French.—The organization of the lines of communications and the autumn manœuvres. When a German Army moves forward to engage its enemy, it leaves behind it a perfect machinery for the supply of its wants and the guardianship of its communications with home. Not a man is taken away from the fighting troops to guard the roads and railways. No matter how far the Army may penetrate, its only losses are those caused by wounds or pestilence. Its Commander has never to look back with fear lest the dépôts of provisions and ammunition should be ill-supplied. It is not his business, but that of a department called the Etappen Department, which occupies the line of communications as fast as the fighting men extend it. Each corps district at home is sending stores and clothing to the great Etappen line of the Army. They are forwarded along

that line till close to the front, and then the Etappen Department of the corps receives and distributes them. The honourable, but less dangerous, duties of the Etappen lines are performed chiefly by the Landwehr, who have had much practice in such work, and know by experience what is likely to be wanted and how to supply it.

The second peculiar advantage of the Prussian military system is the method of training the troops for war. When the summer drills are over, and the crops are all cut, the men who have hitherto practised their work in battalions, brigades, and divisions, are assembled in corps, and made to manœuvre against each other exactly as in war, except that their weapons are not loaded. Every department has to perform its own functions, while the talents of individual Officers are tested.

All things necessary in war are practised. Outpost and intelligence duties, patrols, and reconnaissance, billeting, and bivouacking.

There are, doubtless, in these manœuvres many actions committed which would not be practicable in war. But such mistakes are generally observed and corrected by the umpires, who are chosen from among the best known Officers, and whose judgment is trusted. Besides, are not all drills, except the very simplest, but practice of manœuvres impossible in war? Just as drills are necessary to bring troops into hand, and teach Officers to handle them, so are the Prussian manœuvres perfectly adapted to bring the men under thought, and to teach Officers to head them.

The French had their great manœuvres, too, but they were, mostly, performed in camp, and were but big drills exercising the memory but not the power of initiative, nor that faculty which, under different forms and under various names, such as design, combination, or imagination, enters so largely into the power of producing good work in the studio of the artist, in the library of the philosopher, and in the tent of the General. I should dwell further on this branch of the subject, which I consider one of the most important of all, but that I see on your list a notice of a paper to be read on "the Prussian system of autumn manœuvres," by Colonel Shute, and I will not trouble you with my poor way of saying what that gallant Officer will put before you much better and more fully.

Last on the list of contrasts between the military systems of France and Prussia, but certainly not least in importance, is the education of Officers. Here, again, the great difference is one of principle. The Frenchman has hitherto been what I cannot but call the victim of a most elaborate and well-devised system of cramming,—that is the Frenchman who is taught at all; for it must be remembered that a large proportion of French Officers rise from the ranks, and are often very ill educated. The Prussian Officer must in every case, except that of promotion for actual bravery in the field before an enemy, spend a certain time learning the regular duties of the soldiers, and, also, pass examinations, both theoretical and practical, besides being elected by the Officers of a regiment. But there is a great difference between the French and Prussian examinations. It is this. The Frenchman has

little time to answer many questions. The Prussian has much time to answer few questions, but the answers must be thought out.

Here are two questions actually set to the students of the Artillery and Engineer school at Berlin in 1868, with the time allowed for them.

- I. "What advantages would be gained by the field artillery if the principle of simplicity were to be completely carried out, and why has this not been done?" (Time allowed, one hour.)
- II. "The employment of field artillery in engagements in defiles." (One hour and a half.)

Questions, truly, with much in them, but consider how many Officers are there in most countries capable of sitting down to write on either of them for the time given?

Austria, beaten in 1866, set about reforming her military system. Listen to a word or two, written by a man of great talent and ability, one of the few who came out of the war with unsullied character, nay, with much additional brilliancy to his fame. General Kuhn, Minister of War for the Empire, wrote thus in 1868:—

"Experience shows us, therefore, in both of these special educations (philosophy and mathematics), the remarkable effects of these theories of philosophers. The history of German philosophy sufficiently shows this, and that of excellent mathematicians, who, in practical life, are worth nothing, because they cannot leave their angles and figures in thinking and acting. All this goes to prove that . . . a satisfactory result can only be obtained by a union of both systems, or a harmonious development of the mental faculties. It is necessary that the school books should be carefully revised; at present they are laden with chaff, which burdens the memory too much, and is blown away by the first wind after we leave school. As regards history, only such events as will by their example lead the heart to admire the noble and truly great, need be fully described and illustrated."

These are not the words of a sentimental dreamer, but of the hard-headed and brave man, who, with ten thousand soldiers, held the Tyrol against Garibaldi and Medici, though they out-numbered him four to one.

Now hear something from the official instructions for the war schools of Prussia:—

"The acquisition of the positive knowledge necessary for the immediate professional duties of a subaltern Officer, is undoubtedly an object of the greatest importance, which is to be looked for from the course of instruction at the war schools. But it must be regarded as still higher and more lasting advantage to stimulate the power of grasping principles, and to arouse that strength of reasoning and intellect which accompanies a young man throughout the whole of his subsequent career, and is of utility in all stages and phases of life.

"In the system of education at the war schools attention is to be paid to strengthening, and basing upon moral principles, the sentiments of patriotism, loyalty, magnanimity, and self-denial, by which

"an Officer's duties towards his king and country can be fulfilled in a far higher sense than by a mere mechanical performance of routine duty.

* * * * *

"It is consequently necessary at the schools to aim less at a number of subjects of instruction than at a clear and systematic arrangement of the knowledge acquired, and above all to develop abilities to the utmost, and to arouse to the greatest possible degree, independence of thought, so that reflection may come to the assistance of memory, and that details which are forgotten with time may be easily worked out afresh by the exercise of the reasoning faculty; it should be the object to attain such readiness in employing reflection and applying the general principles acquired during the course of instruction, that a young man may be in a position to pursue the path upon which he has begun to tread, by his own unaided powers, without the guidance of his instructor."

Such were the main features of the French and German military systems in 1870. I have dwelt less on the evil than on the good, because we all recoil from contemplating the mistakes that led to the bitter suffering over which we grieve. The one was based upon past fame—a breath of wind—and present riches, a golden chain to the spirit of man. The other was based upon self-denial of a whole country, discipline, perfect organization, and development of both mental and moral faculties. Could there be a doubt of the sort of structures which, alone, could be built on such foundations? The French, imposing in appearance, yet no more than an imposture; the German, plain in its exterior features, but solid as the Hartz Mountains. Whether France will at last be wise, free and great, cannot yet be known. Only this much we can see, that the rich shopkeepers of Paris have not heart to stand up like men and put down the mob they detest and fear. Still, I am not otherwise than hopeful that the fires through which the country is passing will purify it. England, now at peace with her neighbours, has time to take thought and decide on the principles of her future military organization. She may—Heaven grant it—take for her motto the words which Shakespeare, the great master of humanity, put into the mouth of no sentimentalist—Harry V, King of England:—

"By Jove, I am not covetous for gold,
Nor care I who doth feed upon my cost;
It yearns me not if men my garments wear,
Such outward things dwell not in my desires;
But if it be a sin to covet honour,
I am the most offending soul alive."

But, if she persists in asserting that she cannot find soldiers enough, while there are more paupers in London than soldiers and sailors together in the United Kingdom;—if she cannot find brains to organize her Army, nor money to pay for the protection of her honour, though she spent more last year upon those very paupers than nearly one-sixth of the North German military budget for the same year;—if the spirit of

gain gets such hold upon us that our natural leaders in war, the aristocracy by birth, cease to enter a service where the soldiers shall only be bought by high bribes, and the Officers shall think more of their emoluments and social position than the greatness and safety of their country, who can doubt that some day the dread saying will be pronounced against us, familiar now as household words, yet of how little moral influence—"Thy money perish with thee, because thou hast thought that the gift of God may be purchased with gold?"



7

THE BRITISH REGIMENTAL SYSTEM

IN REFERENCE TO

THE PROPOSED RESERVES.

BY

GENERAL LORD DE ROS.

LONDON:
SMITH, ELDER AND CO., 15, WATERLOO PLACE.
1871.



THE BRITISH REGIMENTAL SYSTEM,

ETC. ETC.

It was repeatedly stated, both in the Lords and Commons, towards the end of the last Session, that, although reductions had been made in the British army, its "efficiency for service" had been nowise impaired, and that some 20,000 men had been actually added to the rank and file of the regiments.

Whatever faults may have been attributed to the organization and management of the British troops, when assembled and acting in large bodies, the individual "regimental system" has long been regarded, both at home and abroad, as remarkably solid, complete, and effective. It has been exposed on service to the severest trials, but, as no success has relaxed it, so no reverse has been able to dissolve it; and it is, in truth, a wonderful combination of principles and elements, which constitute a

body of men and officers bonded together by obligations, attachments, and moral control, which exist in no other service in the world.

One of its great and peculiar merits is the perfection of its "cadre," and the chain of responsibility carried down through the different ranks of its officers and non-commissioned officers (the latter being confessedly the best of any in the armies of the present day).

But, from first to last, the merit of our regimental system, and of the instruction and formation of our excellent non-commissioned officers, mainly depends upon the exertions of the captains, adjutant, and elder subalterns, and upon the manner in which they carry out the wishes, instructions, and orders of their Commanding Officer. The captains of our troops and companies are generally young men, who take a pride in their duty, and perform it in such a way as to command the respect, obedience, and attachment of their men.

It is to them, the commanding officer looks, for cordial support of his authority, and the maintenance of strict, but just and impartial, discipline. Most of them have entered the service with the ambition of advancement and distinction. There is a marked difference, be it here observed, between the Officers of the French and English services, in the control exercised by regimental Commanding Officers over the character and conduct of their subordinates. In a French regiment, those

officers, provided they perform their military duties correctly, are permitted to live as they please, and to associate with whatever company they please, unchecked and almost unnoticed by their superiors.

When brought before court-martials, the charge in the French service is simply for the military offence, but with us the charge is usually drawn out for "conduct unbecoming an officer and a gentleman," in committing the offence in question. This is the peculiarity which renders a good British regiment a strict and useful school of training for the young officer. Nor must it be forgotten, that one of the mainsprings of this system is the *regimental mess*, an appendage of the British service unknown in the French and most of the Continental armies.

Marshal Marmont—an excellent and impartial judge of military organization—lays great stress, in his interesting memoir on the armies of Europe, on the valuable influence of the *regimental mess* on the behaviour and manners of young British officers, who, from the moment they join, find themselves checked in any irregularity of conduct, but, at the same time, treated with the consideration common to all who sit at the Officers' mess-table.

In this, and in most other respects, the footing on which our young Officers commence their regimental life is different from the French cadet system, by which every Officer is obliged to join the ranks as a Private in the first instance, where he usually finds it no easy task to live, with the

habits of a gentleman, among the soldiers, who rather pride themselves on refusing to show him any deference, till the very day when he puts on the uniform of an officer. Meantime, he acquires, it is true, the drill of the private soldier, and the routine of his daily life, and is prepared for all the duties of the ranks. But it is not for a private soldier you want him. Your object is to get a competent "Subaltern Officer;" and by our system, he joins in the position which he is intended to fill, and while the drill-sergeant thoroughly trains him in the exercises of the soldier, he at the same time instructs him in his rudimental duties as an Officer, by teaching him from the very first, to move and command a small squad of men, to give a loud and distinct word of command, and to take his proper post on parade.

Much has been said and written of the superior instruction of the young French Officers, and the stringent examinations they are required to pass before they emerge from the ranks. It is a plausible theory, but for making an efficient "Subaltern Officer"—which, as before observed, is *the article you want*—it may be doubted whether any better primary training could be desired than the drill of the soldier, combined with the rudimentary instruction of the company Subaltern, which our young Officers receive from the sergeant-major and adjutant of the Regiment, during the first six months of their service.

Much further instruction is no doubt necessary as the Subaltern advances in regimental rank, but before you plunge him into "strategy" and the "art of war" (which some persons believe may be taught as easily as the game of chess, and by teachers who have never commanded 500 men), it is surely necessary, to train him to a thorough knowledge of his regimental duties. From the early practical instruction then of our Subalterns, we must obtain our effective company Officers. It is the root or seed from which we expect the plant to grow, and unless carefully cultivated at first, will seldom come to any perfection. But, unfortunately, it was this very source and mainspring of regimental organization which the Secretary for War thought proper to cut off, by his extensive reduction of the supply of young Officers to our regiments, last year. No wonder that Officers of experience were dismayed at this injudicious retrenchment.

Report attributed to a high official member of the House of Commons some remarks on the uselessness to regiments of a number of young officers, whose chief occupation (as it seemed to him) was lounging about the streets of the country towns. Had that right honourable gentleman seen some of our young Subalterns crawling to their tents, after a night of watching and danger in the cold and wet trenches before Sevastopol, where, with the true spirit of the British Officer and Gentleman, they had been setting to their men the bright

example of energy, endurance, and bravery, he would probably have paused, before uttering an opinion so unjust in itself, and so offensive to the younger branches of the British service.

It was once said by an eminent foreign officer, that the British troops were the best in Europe, but *heureusement il y en a peu.*

This want of number is the problem of the present day, and the wildest and most fanciful schemes are propounded for obtaining an army, small and cheap in peace, but capable of rapid increase on the first menace of war. Now whatever system may eventually be adopted, one thing is clear enough; that a complete framework, or "cadre," must be required, for any army subject to considerable variation of numbers, and it has indeed been the great merit of our system, that regiments returning from India, reduced by sickness, volunteering to other regiments, and various causes, to a third or a fourth of their proper complement, have been, within a few months, recruited, re-established in discipline and efficiency, and able to make a respectable appearance by the side of other regiments in brigade.

The vacancies created by the Secretary for War, of a considerable number of Cornetcies and Ensingnies, has already sensibly affected this facility of regimental revival, which so mainly depends on the exertions and sufficient number of the troop and company Officers. If so much depends on them in

peace time, how infinitely more necessary must they be in the emergencies of the field. Both in the late Russian war and in the Indian Mutiny, more than one British regiment has come out of action under the command of a Subaltern ; and when small detachments, patrols, and escorts, are constantly wanted, especially in the Cavalry, the work devolved upon the Subalterns is unavoidably extremely severe : they become sick and exhausted, and the utmost difficulty arises to provide Officers for the necessary duty, as has been proved on too many occasions.

There has been a fashion of saying that we are not a military nation, that our men are entrapped when drunk, and that most of our officers enter the army as an amusement, rather than as a profession, knowing little, and without ambition to learn more. The best refutation of the assertion that most of our recruits are entrapped into enlistment, is the recently adopted system, of sending up recruits by railway, and without military escorts, when it appeared, after a year's trial, that not 10 men in 1,000 absconded on the journey. Does any one imagine that, if to-morrow any one of the Continental Powers were to abandon conscription and attempt to maintain their armies by voluntary enlistment, they could obtain anything like the proportion of *willing* recruits, which this fact so plainly proves to be obtainable by good management ? If, then, it be true, that a taste and inclination for military life exists to a wide extent among the lower classes of

our population, it is equally certain that among the upper classes, the same taste exists in a higher degree; and a greater calumny can hardly be uttered, than to assert that the young English officer is less ambitious of military distinction, or less alive to the necessity of preparing himself to fill high positions in the service, than the French or other Continental Officer, and that he can, therefore, be easily dispensed with in regimental organization. If his out-door habits and love of sport do not exactly dispose him to abstract study, they certainly prepare him for the rough duties of the field. Nor must it be forgotten, that these habits unquestionably give him influence over the men he commands. The British soldier neither knows nor cares whether his captain is a mathematician or not; but when he sees him displaying spirit and energy, whether at football and cricket, or in a sortie, or attack on an enemy's advanced post—he is proud of his officer, and will stand by him in disaster as well as follow him to victory.

These remarks are by no means intended to disparage scientific acquirements in a young Officer, but with the view, if possible, to disabuse those who imagine that talent and science are absolute necessities for every military man, forgetting that good plain sense, a generous, bold character, and experience gradually gained and turned to account, will do more towards the formation of a capable and good officer than any abstract study of the sciences. It is

not every man who is by nature fitted or intended for the top step of his profession ; but, because a man has not the genius for war of a Moltke, or a Roon, that is no reason he should not become a most valuable Commander of a regiment, and unless the regiments composing his army are ably commanded and handled, all the genius in the world will avail little to the most able General. Theory will, however, never make the valuable regimental Commandant above described. Early, careful, and strict regimental training as a Subaltern is the best and safest road to such distinction—for *distinction* is by no means too elevated a term to be applied to a lieutenant-colonel who brings his regiment to great perfection. Can it, then, be wise to adopt the reduction of the number of Cornets and Ensigns, as the least hurtful mode of decreasing the expenses of our military establishment ?

How can you expect to have able and efficient captains, unless you have a sufficient number of Subalterns in preparation and training to fill their posts, when those captains are removed by the ordinary course of promotion ; still more so when the casualties of war so rapidly increase the demand for troop and company Officers. It has been a popular cry to complain of our regimental Officers for a supposed want of professional acquirement, yet by stinting the supply of Subalterns you cut off the only reliable means by which young Officers can be preparing themselves for higher commands. Tests of

examination have been established for several years in order to make sure that every young gentleman, before he is appointed to a regiment, is possessed of a fair education ; and if he then commences his military service, by a proper course of regimental instruction and practical training, it is hard if you do not get the substantial material for the eventual formation of a good and useful Officer.

It has never been enough considered, that the early habits of *command* and *management* of the soldier, which forms, in truth, the most valuable part of a young Officer's training in our regiments, is the great feature in that "regimental system" of the British army, which few critics have ventured to decry or disparage. The foreign cadet system, by which every young officer is required to join and serve in the ranks for some time, may form a private soldier, but it will be worse than useless for forming a young English gentleman to the exercise of military command.

The jobbing and patronage which attends the service in the ranks, of the French cadet, is remarkably exemplified in the interesting and instructive "*Souvenirs du Duc de Fezenzac*," who was a distinguished and favourite officer of the first Napoleon.

He tells us, that he joined the so-called army of England at Boulogne in 1804, as a private soldier, and speaks with enthusiasm of the spirit of "camaraderie" engendered by his first personal acquaintance

with the brilliant "soldiers" of the first Empire ; but he happened to have an influential relative and patron in the Colonel of his regiment, and before ten months had elapsed he was rapidly passed through all the grades of a non-commissioned officer, and was actually nominated *sergeant-major of the regiment* ! With our notions of the duties, and qualifications of a regimental sergeant-major, this glaring absurdity and injustice to others may speak for itself. Nor does the Duc de Fezenzac himself disguise the difficulties he found in his sudden exaltation, or the jealousy and insubordination he had to encounter from those who had so very lately been his equals and comrades.

His subsequent career proved him to have been a far better general than he could ever have been a regimental sergeant-major.

But to return to the mutilation (for such it has been) of our regimental establishments, by cutting off some hundreds of Cornets and Ensigns, and thereby affecting seriously the method by which our troops and company Officers are trained and prepared for regimental duties, while at the same time they are quietly brought under that control of example, as well as authority, by which they are made to understand that the "Officer and Gentleman" are terms and characters inseparable in the British Army. It was very well to say, at the time when the peace of Europe appeared as stable and secure as it has lately become the reverse, that the

country insisted on great military reduction, and that the lowest grade of Officers was that, from which a certain proportion might best be spared, but that condition of things is wholly changed; the outcry is now for better military preparation. Every imaginable scheme and conundrum is now thrust forward, and every fresh project seems to gain the better hearing from its novelty. Instead of endeavouring to restore, we are wild to create, and it is worth while to cast a brief glance at some of the results of this avidity for change.

Short service, abolition of the lash, no end of cubic feet of air allotted to each soldier in barracks, more variety for his dinner, and every sort of scheme for his instruction and amusement, all these expedients have been adopted, in the expectation, not only of obtaining a readier supply of recruits, but also of inducing a "superior class" of men to enlist as soldiers, a theory which the War Minister has repeatedly alluded to in the House of Commons and elsewhere.

Strange as it may seem to him, and to those who adopted his theories of improvement, our regiments, even the favourite ones in the cavalry, have lately fallen far below their complement. In the Scots Greys, forty men were deficient at the close of last year; and the same with many of the most popular regiments of infantry, even it is believed with the Guards.

Then as to the "superior class" who, it is

imagined, will present themselves as recruits ; who are they ? what are they ? where will they come from ? Will merchants' clerks, young tradesmen, commercial travellers, private secretaries, and unsuccessful authors, be tempted to handle the musket, and walk sentry for three years, and then return to their former life and habits ? Why the chief cause of enlistment is generally to be found in a distaste for quiet life, and sedentary or studious confinement ; and the recruit's chief object of enlisting is to enjoy the change and adventure of military life, and the excitement of service.

There is hardly a regiment, especially of cavalry, which has not in its ranks a few of these "superior class" soldiers ; but the officers will tell you that they are generally troublesome, discontented, and insubordinate ; so much so, that Commanding Officers of regiments are very cautious of enlisting men of that appearance. But there is another kind of "superior class" which form the very heart of our regiments, and which furnish the best of our non-commissioned officers. These are not men of *higher station* in life, but they are the men of *highest character in their own humble station*. Sons of small farmers, smiths, carpenters, bricklayers, and other country tradesmen, who come to the service with the hope of becoming non-commissioned officers, and who, from the day they join, study to learn their duty, and to give satisfaction to the officers. These men have no false pride to give rise to

discontent, and so far from thinking themselves above hard work, are always the most forward for labour, as well as danger. These are the really "superior men" who, by example as well as conduct, assist their Officers to uphold the discipline of the regiment.

And here occurs a reflection which does not appear to have had its due weight with those who are charged with the military affairs of the country. The youth who has been brought up in sedentary habits, or even in the more active pursuits of trade, unless early habituated to manual or outdoor labour, will not be *capable* of undergoing the strain of a soldier's life. On hard service the soldier's existence too often resembles that of a half-starved, over-worked labourer, with these serious aggravations, that in the field, the night is no time of rest to the soldier; that if he has a tent to lie under he must share it with ten or twelve comrades; that he often cannot take off his clothes for days together; and that he is lucky if he has straw enough to keep his body off the damp ground during the hours of his uneasy repose. It may be asked, perhaps, do not Officers, (who were never bred to such hardships), share them with their men? Certainly: there are no officers in the world more ready to do so than our own, but theirs are not hardships of the same nature as the soldiers'; they are mitigated by appliances in food, clothes, and bedding, which cannot be enjoyed by the soldiers from want of conveyance. These

comforts must not, however, be regarded as undue indulgences, for, if withheld, the service would suffer as much in its efficiency as the Officer would suffer in his individual comfort, because his sickness and failure would soon render him unequal to the performance of his most important duties, those of superintendence and command.

The preservation of the Officers' health was always a great object of the Duke of Wellington. With this view he permitted officers of the Infantry to keep horses for riding on the march, and was often heard to observe that good soldier servants were next in value to the non-commissioned officers of a regiment, so much did the Officer's efficiency depend on their care and attention; and this particularly applied to the younger Subalterns on first joining, whose inexperience rendered the care and attention of their servants the more necessary.

To return to the main question of the late reduction in the number of Subalterns, and the stoppage of the yearly entrances by which their number used to be kept up, enough surely has been stated to show that the young Officers of our regiments are by no means the cyphers which it was found convenient to represent them, and that their early training in a regiment is the only means by which the supply of effective Officers can be kept up.

Should war at any time impend, the very first requirement would be to complete the cadres of the regimental Officers, and there can be no greater fallacy than to imagine that Military Colleges, how-

ever well managed, can furnish them ready made, at an hour's warning. All experience has proved that although our young Officers' training is very different from the cadet system of some foreign armies, it is quite as effectual for forming the Subaltern; and whatever may be the machinery eventually adopted by Government, for extending and supplementing the numbers of our troops for the defensive service of the country, the very first step must be, to render our regular forces—of which it was so truly said by an admiring enemy, “*Heureusement il y en a peu*”—complete and perfect in all respects, so as to provide a firm and substantial basis, on which to engraft any schemes of militia or other reserves.

How this is to be done will be for the anxious consideration of the Government, but our long established and well tried regimental system cannot with impunity be further tampered with. Attacks of the most unreasonable nature have been made upon it, and the wildest propositions entertained for its amendment; but it has been, in the main, supported by its own stability, and by the good sense of the nation, and has hitherto maintained its unequalled character, respected by the country and formidable to her enemies :—

Duris ut illex tonsa bipennibus,

• • • • •

Per damna, per cædes, ab ipso
Ducit opes, animumque ferro.

• DE ROS, *Genl.*

POSTSCRIPT.

One word on the reduction of the period of soldiers' service, which is now advocated by many, who regard that question as one of State policy without much knowledge of its military bearing. In describing our regimental system, much stress has been laid in these pages on the bond of attachment as well as discipline between the Officer and Soldier—a feeling comparatively unknown in Continental services, but prominent and beyond all value in ours. Now, short service is short acquaintance, and certainly the shorter the acquaintance of the Officer and Soldier, the fewer will be the kindly relations between them, and the weaker will be their mutual reliance. You have long since removed all the disgusts of long compulsory service by enabling the soldier to purchase his discharge a very few years after enlistment for a sum so small that, with common prudence, he may save it out of his pay. Why, then, tempt him, as it were, to leave the Army on the first imaginary or trivial grievance? You will be doing him no good, but you will damage the sound and stable foundation of your regimental system, and you will be falling into the dangerous error of supposing that mere

training and instruction in drill for three years will form a soldier; but it cannot, and will not, form the true type of a *thorough British soldier*, proud of his Officers, proud of his Regiment, and identifying himself with the renown which its services have acquired for its Colours and its Name.

DE R., *Genl.*

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not used

AN AUSTRIAN VIEW OF THE DEFENCE OF ENGLAND.

BY THE BARON VON SCHOLL, MAJOR-GENERAL, AUSTRIAN ARMY.

EDITED BY LIEUT.-COL. C. C. CHESNEY, R.E.

SINCE the death of Sir John Burgoyne there is perhaps no one living who has made that special branch of strategy which deals with the value of fortifications so completely his own as the writer of this memoir. His Excellency General Baron Scholl is well known as lately occupying the post of Minister for National Defence in the Austrian Cabinet, an office which may be said to have been created for the time in order to give the reviving Empire of the Hapsburgs the special benefit of his counsels under new military conditions. He had previously held a post equivalent to our Inspector-Generalship of Fortifications; and his services had been specially called on for the necessary defence of the great Quadrilateral fortresses in 1859 and 1866. The very strength of their works, and the defensive strategy adopted by the Austrians, combined to prevent their engineers from being called on for more than preparation. But Baron Scholl is far more than an engineer. No scientific part of the military profession has escaped his grasp; whilst his study of military exigencies in other countries than Austria is so close that it is the editor's belief, the result of personal conversation on the subject, that it would be difficult, perhaps impossible, to find any Frenchman at this moment so thoroughly conversant with the past and future of the defences of Paris, for example, as this distinguished foreigner. It cannot be a matter of indifference to the public to see his thoughts on our own defences frankly given us; and they are the more important as his views differ widely from those of the highest authority we possess.

The Editor of *Macmillan* having kindly offered this memoir, as of national interest, the benefit of its wide circulation, it is necessary to say that its late appearance, considered as a review of Colonel Jervois' Royal Institution lecture on "The Defences of England," delivered last year, is explained by the latter's having only fallen, in a complete form, into Baron Scholl's hands this spring, when visiting England after a close professional inspection of the works of Paris, and by the delay of translation—for it was in English dress that it came over. The duty has fallen to me of compressing it, in order to bring the paper within magazine limits; but I have striven to do this without treading on the author's ground, or depriving the reader of the

benefit of any of his opinions on important questions. It is enough to add that the subject which Baron Scholl treats with such startling knowledge is doubtless studied on the Continent elsewhere than at Vienna.—C. C. C.

COLONEL JERVOIS's pamphlet¹ was put into my hands during my last visit to England, with the request that I would give my opinion frankly upon the whole subject, and especially upon the fortifying of London.

The circumstance of my not being an Englishman may arouse suspicion in the reader, that I may not care to write what I really think, or that the proposals I may make would be contrary to the public interests of the country. May I be allowed as far as possible to clear myself beforehand from suspicion of this kind?

As an Austrian I belong to a country which has never yet been at war with England, but, on the contrary, has often been its ally, and it is hoped may be so again. That Austria is the natural ally of England has indeed become almost a proverb; and when I had the honour, in the year 1851, of being presented to the Duke of Wellington, he said, "It is always a pleasure to me to see one of our old allies." I have also been personally connected with England through a series of years, by ties of friendship and relationship, which my recent visit has served to strengthen. And if a man's word has any weight with the reader, will he accept mine, that I shall endeavour to treat this sub-

¹ "The Defensive Policy of Great Britain, considered in a lecture delivered at the Royal Institution on May 12th, 1871." By Colonel W. F. Drummond Jervois, R.E., C.B., Secretary of the Committee on Defences, and Deputy Director of Fortifications. London: 1871.

ject as though I were myself none other than a loyal Englishman?

Colonel Jervois' pamphlet appears to me divisible into two parts. For while the first eight chapters treat of the general conditions affecting the defence of the mother country, its coasts, its colonies, and its commerce, the rest are exclusively devoted to the necessity of the fortification of London. And it would seem to me as though this were in the main the object the writer had in view.

I not only agree with Colonel Jervois in all that he advances in his first eight chapters, but would also add to his arguments the following:—

1. AS TO GIBRALTAR.

In an article which appeared in 1869 in the publications of the Austrian Engineer Committee, I endeavoured to set forth the great importance of Gibraltar to England. The Straits, indeed, are not actually so narrow at that point that they could be closed by means of heavy guns planted on Europa Point; yet the Bay of Algeiras, adjoining on the west, affords good shelter for a fleet ready to attack in flank any enemy who should venture to pass the Straits. By this means, England in the event of war at once cuts in two the navies of all such Powers as possess fleets on both sides of the Continent, as is the case with Spain, France, and Russia; she may at her will confine the navies of the Mediterranean (as the Italian and Austrian) to that sea, and prevent all others from entering its waters.

Besides this, Gibraltar forms a station for coaling on the all-important road to India through Egypt; and Nature herself has already so fortified it that it has become a proverb to say of any other very strong place, "It is a second Gibraltar." I agree, therefore, in strongly combating the opinion of those who talk of giving up Gibraltar.

In view of the interests of England, I would not even hear a word in favour of taking Ceuta in exchange for Gibraltar, for Spain could not reimburse the expenditure which has been made

upon Gibraltar; and, besides, the Bay of Ceuta is unfavourably situated with regard to the Straits compared to that of Algeiras, and is more exposed to the weather. Ceuta could never be made by any art so strong as Gibraltar; and finally, the glorious memories which attach to the Rock would be wanting to inspire the garrison in case of an attack.

It is undoubtedly true that the Spaniards could incommode ships lying in the Bay of Gibraltar, and could even cannonade the harbour. But for this there are two remedies—either let England acquire the Spanish territory about the Bay of Algeiras and fortify it; or let England keep good friends with Spain, which is all the easier, because Spain is at present much interested in cultivating the support of England.

2. THE ISLE OF WIGHT.

The south coast of England, in its extent from the Land's End to Ramsgate, is certainly the most exposed, on account of its proximity to the French coast; and as the Isle of Wight lies in front of this coast, and is only separated from the mainland by the narrow channel of the Solent, this island appears to me of such importance for friend and foe that I cannot sufficiently recommend it to attention, and I would wish to see more done to fortify it than has hitherto been effected. The Solent is to an English fleet just what the channel near Pola was to the Austrian before the battle of Lissa, affording good shelter and free issue, either towards east or west.

The Solent, in fact, is the true offensive basis for British maritime operations; but it would cease to be so from the moment an enemy was in the Isle of Wight. This is my reason for asserting that the defences of this island should be further strengthened. This is the more necessary because an enemy lodged there would have within reach of him, at the short distance across the Solent, a most desirable *piéd à terre*. It might be alleged that a landing at the back of the Isle of

Wight is difficult from the nature of the coast, and that the enemy, having no port there, would not seek to occupy the Isle of Wight, because troops once landed could not be reinforced or supplied in bad weather, and would even be in danger of starving. But many persons acquainted with the locality believe that a landing is perfectly possible, the sea often remaining calm for days together. And it would perhaps be to the enemy's interest to seize the Isle of Wight, with the object of diverting the defender's attention from points of landing elsewhere. In that case he would throw only a small number of troops on the island, and the landing would occupy but a very short time. They would thus be little exposed to danger from a sea getting up during the operation, and the small number could easily be provided with food and ammunition sufficient for a considerable time.

With the enemy in possession of the Isle of Wight, there is the striking disadvantage that the works which serve to close the Solent at the Needles passage and Spithead are taken in flank and rear, that the fleet can no longer use the Solent, and the entry into Portsmouth is endangered. Moreover, in order to check the further advance of the invader, it would be necessary to concentrate a superior force on the English coast, cut in two as it is by the deep inlet of Southampton Water, and any English army acting elsewhere would be correspondingly weakened. I assume here, naturally, that the enemy has not only infantry but also guns on the island, for it is only with the shells of these that he can reach the northern shore of the Solent. The island is in fact a very tempting object for an enemy; for if the landing succeeds, he secures himself a footing from which he cannot be easily expelled, having the Solent, like a gigantic wet ditch, in his front. It may be further said of the Isle of Wight, that its preservation is all the more important in English interests, *inasmuch as* by its means the disadvantages of Portsmouth (the position

of which, under modern conditions, is very bad) are somewhat obviated. Portsmouth, as a great naval depôt, is far too advanced. In regard to this question, I must recognize the wisdom of the English Government in having, as has been the case quite recently, paid increased attention to the more secure position of Chatham, and having made extensive preparations there for building and repairing ships of war.

I do not propose to enter here upon the question of what further fortifications are necessary on the Isle of Wight to prevent the enemy from occupying it, for this is a question of detail, the solution of which my honoured friend Colonel Jervois understands as well at least as I can pretend to.

3. THE ISLE OF ANGLESEY.

No reference is made to this island in the treatise, possibly for the reason that it lies on a less exposed side of the country, and because Colonel Jervois, considering the shortness of the time available to him, did not wish to bring too many questions under consideration, and desired to arrive as soon as possible at his virtual object. Perhaps I may be allowed to add something relative to the Isle of Anglesey.

Although I am not of those who believe in the probable outbreak of a war between England and the United States, in which the latter could play so aggressive a part as to carry the operations into the mother country, yet nevertheless one should for safety's sake accept the supposition that the Americans, aided by a coalition of European States, might carry the war to Europe. In such a case Ireland might become a base of operations in the prosecution of the war, and considering the small width of the Irish Channel, the Isle of Anglesey would offer the same advantages as the Isle of Wight, and become a good *pied à terre* naturally secured from attacks from England by the Menai Straits.

On a closer comparison with the Isle of Wight, Anglesey has the advantage being in possession of a good harbour

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head, whereby troops could be lied and reinforced whatever the her. It appears to me very necessary some special attention should be to its defences, although, on the : hand, I must allow that the Menai ts do not form a rendezvous for leet like the Solent, neither is there point in the vicinity resembling smouth in importance.

4. IRELAND.

Colonel Jervois speaks of the necessity keeping a strong force in Ireland in of war. Thoroughly agreeing with view, I cannot divest myself of the shension that the enemy might suc- in possessing himself of Ireland ; s it would be undesirable to weaken army in Great Britain too much, force in Ireland could never be very , and on the coast of Ireland there number of unfortified harbours and where the enemy could very easily

the possibility of the loss of the d should therefore be held in view, t should be considered what should ne either to prevent it or to regain sland if lost.

the first end would certainly be ob- d by means of fortifications. But if only so much were done as to nt enemy's vessels from lying in harbour, this would involve the nditure of a very formidable sum.

would be better to undertake first would be necessary for effecting recapture of the island. This in- as the means of landing an entire r with all its material without mo- tion, of putting it in a position to the offensive immediately under irable conditions, and of having a t of security to fall back upon in the t of failure in the open field. In r to the further question whether or two points of the coast should elected for this purpose, I would inly say *two*; for advantages not only le, but manifold, are to be derived from. For suppose one point of the *only prepared*, should the enemy *position before it* with his entire

strength, it might happen that it would be altogether impossible to debouch, or the prospects of success be very much diminished. But if two points of the coast are so prepared, and the English army lands at that one where the enemy is not, there is no obstacle to debouching. And should the enemy take position before both points, he has committed the fault of dividing his strength, and the English army has good prospect of beating the enemy in detail. The existing fortifications of Cork are not sufficient for such purposes as the above, as they only serve to prevent an enemy on the leeward side from forcing his way into the harbour. The existence, however, of these fortifications and of the harbour establishments, and the geographical situation of Cork Harbour, with reference to a British fleet stationed on the English coast, and an army held ready for embarkation, should be sufficient to designate this as one of the places spoken of, whilst the other should be in the northern section of the eastern coast near Dundalk, if the natural conditions are appropriate. Not at Dublin, certainly, for this would be too near Cork, and the development of the town would be interfered with. Cork and Dundalk would be, so to speak, the *têtes du pont* which would facilitate the recapture of Ireland, and would also serve for any troops to retreat upon which had been unable to prevent the enemy's landing, and obliged to retire before numbers.

5. A CENTRAL ARSENAL.

Notwithstanding that Colonel Jervois has drawn attention to the importance of a central arsenal, I cannot refrain from saying that its importance appears to me so great, that every means should be adopted to call it into existence as early as possible.

At present, all the supplies for the army are on the coast, which is at the same time the frontier, and consequently so placed as to be most exposed to the enemy's attacks. This is contrary to the natural order of things, and might lead to the very worst consequences.

Even Woolwich is not properly placed in view of war. The Central Arsenal should contain all the stores of the army, and partly of the navy also, and should accommodate all workshops for the manufacture of war material.

In order not to weaken the active army in the field too much, the arsenal should be capable of being defended for a long time by a small number of men: this obliges us to search for a locality where nature has already done much to facilitate defence. The fortifications should be designed with a view to mere defence, for the offensive might lead to losses too serious for a small garrison. There would be a wise economy in the creation of a Central Arsenal, for at present the stores being scattered on the coast lead to many places being more strongly fortified than they otherwise would be, merely because they are dépôts of supplies.

I am not inclined to dispute the point as to whether Sheffield or Cannock Chase would be best adapted for a Central Arsenal. This is matter for special local inquiry. I would only remark that the *locale* should be one where Art comes to the aid of Nature only, and not where everything must be left to Art; for such artificial fortifications are expensive, and never can assume the large proportions to be met with where Nature herself co-operates in the defence, as she often does on a gigantic scale.

6. ARMY ORGANIZATION.

On the Continent the English military organization is often blamed, and the institution of Volunteers laughed at. For my part I have never been able to join in this blame and derision.

The system of voluntary enlistment is of course far less of an injury to personal freedom than the conscription, or any form of compulsory levy; and the raising of volunteers is less injurious still. Enlistment provides soldiers of long service, which is particularly desirable for non-commissioned officers, and also for soldiers who enter the

cavalry or other special arm. Under the law of universal liability to service prevalent on the Continent, the want of old soldiers is bitterly felt, and everything put into operation to meet the disadvantage has been insufficient to wean men from the attractions of their homes. I believe, therefore, that England ought to adhere to her present system of enlistment for the standing army, all the more because she requires a system of long service, scattered as her troops are over the world, and hampered by the difficulties of foreign relief.

The institution of Volunteers I would also preserve, with all its shortcomings; for it has the great advantage of being of spontaneous growth, and only requiring fostering care. I am persuaded that the Volunteers, if called to arms by the country in earnest, would be on the spot and ready for action in a trice.

This is guaranteed by the patriotism of the Briton, his habit of self-reliance, his respect for the law and public opinion, the consciousness of the possession of institutions more liberal than any which could be given him by others, the memories of former victories, and, finally, a great contempt of the enemy. Where such powerful factors work in unison, no one should despair of such an institution, while its bare existence warns the enemy that he must use far greater foresight than if he had merely the standing army to deal with.

From my point of view, the only disadvantage of the standing army and the Volunteers is that their numbers are too small; a defect all the more sensible because, if a general war broke out, England would probably be obliged to strengthen the garrisons in India and the colonies considerably, and to send them strong reinforcements from the mother country. The words of Marshal Bugeaud on this subject are remarkable: "L'infanterie Anglaise est la plus redoutable du monde, mais heureusement il n'y en a pas beaucoup."

If England has gained many victories on the Continent in spite of the small strength of her army, it must not be forgotten that she was generally

th allies. Indeed, British commanders have derived the further advantage from their allies that they have been able to use them for duties for which the English soldier is least well adapted, viz. skirmishing; for the red¹ uniform, and the contempt of cover which is the consequence of an excessive daring, lead to heavy losses on such service. England should accustom herself to consider the possibility of having to rely on her own resources in the case of general war, and of encountering a coalition which could bring a superiority of force against her. Under such circumstances nothing remains but to develop one's own forces to the utmost; and as this pressure can only be of a temporary nature, the question of personal freedom should be set aside for a time, and every man fit for service called to action. Without abolishing what exists, and setting up something different in its place, it would be well if England raised her militia into a militia at least in the sense of the law of universal service, training them solely as auxiliaries for the defence of the country.

As a pattern for such a militia, I would recommend that of Switzerland, which, though costing very little, showed in 1870 a readiness for service which did them the highest honour.

The first training of recruits, and the ridiculous call out to manoeuvres, would certainly affect the national economy considerably. Colonel Jervois reckons a cost at 30*l.* sterling per man per year; but where the independence of a country is actually at stake, money considerations sink into insignificance. Switzerland, with her republican feelings, and her possessions which no one envies, recognizes this universal obligation, how much more should England do so, whose riches are the envy of the continent, and whose foreign possessions are constantly exposed to so many dangers!

¹ *very doubtful assertion this. Many soldiers declare red to be one of the conspicuous of colours at a moderate price.*—C. C. C.

7. LONDON.

Having referred to what seemed proper to supplement the first eight chapters of the "Lecture," I now pass to the consideration of what I regard as its chief conclusion—the fortifying of London, which my honoured friend wishes to see effected.

The importance of the subject is such that I think it necessary to say something on the theory of the subject; for in all matters of fortification there is a theory, and the application of it to a given case is a subsequent stage. The defence of capitals is a subject for such a special theory, and perhaps this question has never been so well ventilated as in the present century. While some advocated the defence of capitals, others, and among them even military men, have declared it to be folly; and therefore, if we ask, in this case, which is the true view, the answer cannot be made, as it so often is, that a middle course is the true one, for here there is no middle course—either fortify, or do not fortify! "To be, or not to be, that is the question."

When it is considered that in such fortification strategical and tactical data are but part of the determining factors, and that other circumstances interpose themselves which must have great practical weight, it is clear that the answer may be given with as much justice in the negative as in the affirmative, *according to the special case*. Wherever the whole life is concentrated in the capital, and this is exposed to be easily reached by the enemy, as in the case of Paris, fortification appears highly necessary; but where those conditions are different, as at St. Petersburg (on the land side), Moscow, or Madrid, the argument for fortification is lost; or if it still holds good in part, the question arises whether the expenditure which the fortification of the capital demands would not be better applied to other military measures.

It is chiefly among continental peoples that the question of the fortification of the capital arises. Having com-

munication with their neighbours over dry land, they are always liable to attack; and the less the distance and intervening obstacles, the greater the apprehension. This is increased in proportion as the country is centralized, for with the capital the command of the whole country has often been lost, although a considerable extent of territory remained untouched. On this theory we maintain that in the French interest the fortification of Paris is in a high degree justifiable; while, on the other hand, Spain, which with its provincial divisions is decentralized rather than centralized, would do much better to apply her money towards the fortification of the provinces on her border than upon the defence of the capital.

Turning our attention now specially to London, it would be absurd to maintain that London fortified would not offer a much longer resistance than London unfortified. But although London forms officially the central point of the countries subject to the sceptre of England, can this great city be considered as a capital in the same sense as the capitals of continental countries which theorists would recommend to be fortified?

To answer this question aright we must go back into the book of History, and there we find that those peoples who, like the Anglo-Saxons and Normans, took possession of the British Islands, made it their first business to divide the lands and to secure places of residence upon them. They in no way sought to collect themselves in towns, as did the founders of Venice, and, at an earlier date, those of the Roman municipalities.

When subsequently in England markets were established, and towns arose, and the "gentlemen" built themselves houses therein, these were only for temporary wants. The country-seat continued to be so much the principal consideration, that it actually gave rise to an architecture of its own, with a wider range than is to be found in any other country. Thus from the earliest times in England a peculiar country life has

been developed, and the true house of the gentleman is his country-seat, not the town-house which he has built in London, for the most part within such limited horizontal dimensions that the several living rooms are stacked in tiers one above another. The English gentleman, in contradistinction to his fellow on the Continent, passes the greater part of the year, even the winter, in the country: to London he goes merely for business, or to meet friends, or for such amusements as are to be found only where men congregate. In spite, therefore, of the colossal size to which London has attained, it is not to be compared with capitals on the Continent, where the house of the gentleman is in the capital, and the estates he owns are merely regarded as possessions to be occasionally visited.

If under the name of the capital of a country we understand the focus of its life and the development of its civilization, we must, in the case of England, apply the term to a far wider area than the limits of London would offer.

Geographers may be perfectly right in describing London as the capital; but in a politico-strategical question such as this, I should say that the whole island of Great Britain, or at least England proper, is the capital of all the countries which are governed from the British throne.

London has so overflowed into the surrounding country, that it would puzzle the geographers themselves to define its true limits; and if they were to fix the limit to-day, it would be wrong again (and so much the better for the Marquis of Westminster) to-morrow. I have thought it right to notice these facts, because London must be regarded with other eyes than any continental city, and because, as a rule, books on the art of fortification speak of capitals under merely military conditions, and do not allude to the bearings of national culture and of politics on the question.

Besides the gentlemen's country-seats, manufacturing establishments have been set up which appear gigantic compared with those on the Continent, and

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fact, the main sources of England's power and wealth, agriculture and breeding of animals being as nothing in comparison. These mines of wealth are so valuable that it cannot be a matter of indifference whether they are left to go on, or be occupied by the enemy if it come to a standstill.

The argument that the stoppage of the fortifications would create a starving proletariat class, of which the Government would find it difficult to disembararrass itself when peace was regained, is alone sufficiently weighty to cause any great tension of the fortifications to embrace these establishments. We thus come voluntarily to the sea, and as the coast forms a line having in front of it that great wet ditch, I affirm my conviction that the circuit of the fortifications of London is nowhere else to be sought in on the line of the coast, and that the funds designed for the defence of London should be employed to perfect fortifications of the coast.

England, whose insular position makes her differ so vastly from every continental nation, should draw advantage from these circumstances. She can do all the better from the possession of a highly developed network of railways, while the distances of the coast-line from the army stationed centrally are in comparison to other countries very small, and the country so thickly populated that a sufficient number of combatants ought to be soon got together to throw against an enemy attempting to land with good prospect of success. If such force can be brought at once on the spot, a moderate number may prove quite sufficient. For landing an army is an operation which, to be successful, could not be in the least impeded by the enemy, even though weather and coast are favourable.

If we consider successful instances of landing, as in 1840, near Beyrout, and in the Crimea in 1854, we should not forget that these landings were not in the least disputed by the enemy; while on the other hand, another case in 1840 shows that three hundred troops, without any guns, were able to prevent the

landing of the crews of three men-of-war (the *Benbow*, *Carysfort*, and *Zebra*), mounting together one hundred and twenty-four guns. The risk of being forced to retire by the smallest resistance is the reason why naval officers of experience are so careful in selecting places for disembarkation. This is particularly the case when the disembarkation is on a large scale, for then there is more time for bad weather to come on, and the danger arises lest the party landing should be obliged to break off their operations, leaving the troops already on shore to their fate, when they would probably be soon thrown into the sea by superior forces. This is the reason why different points of the coast are of very different importance to the defender with respect to a landing. Small bodies of troops could land almost anywhere, but entire armies only where the locality is peculiarly suitable. Moreover, the advance of the fortification of London to the coast would enable the navy to take an active part in the defence, which it could hardly do were it withdrawn from the coast. In 1870-71 the crews of the French navy undoubtedly took a stirring part in the defence of the forts of Paris; but how much more service would they not have rendered if Paris had lain upon the sea, when they could have made use of their armed ships, and would have been acting on an element and in localities which they knew.

It is not to be denied that the coast-line, even if we exclude Scotland, is very much longer than a ring run closely round London; but in fortification it is often seen that a greater extension gives a stronger form. He who, being in a valley surrounded by hills, seeks to make his defence in the lower ground, will often be less able to resist than if he took up a position on the more distant barrier; and in the case of an island, it often happens that a position on the coast is preferable, partly on account of its steepness, partly from the prevalence of rocks and shoals, but principally because the enemy who proposes to land must undertake con-

siderable operations under fire without being able to answer. Bad weather gives the defender the respite he so often needs, an advantage enjoyed in much smaller measure in the defence of land fortifications. But few outposts are necessary to watch the enemy to seaward during such weather, and the whole of the rest of the force can take its repose without danger.

By the fortification of the coast I do not mean the multiplication of such powerful batteries as those which in recent years have been erected at different points. Batteries for guns of position (upon Moncrieff carriages) are only required at certain very important points, and the greater part of the works would consist at the most merely of earthworks for the temporary shelter of field-guns, of breastworks for infantry, and chiefly in the construction of communications along and down to the coast, and of buildings for the shelter of troops, which could thus be kept at hand and in good condition.

Where long tongues of land stretch into the sea, interior entrenchments could be designed, cutting off such promontories, and so shortening the line of defence. Such entrenchments would certainly not impede any landing beyond them, but by tracing them suitably they could be made so strong that the enemy would never break through. The advance of the line of fortification to the coast should be accompanied by a system of defensive organization; and this organization must, where not already existing, be properly prepared beforehand during peace. According to my view, the whole coast should be divided into districts; and the militia, with the Volunteers in each district, should be practised in the defence of the adjacent coast-line, and in time of war be kept in readiness to be employed on this duty.

During peace a permanent commandant of the districts should be appointed, with a suitable staff; they should make themselves familiar with the locality, and prepare such dispositions as in time of war might become necessary.

It would be always competent to the commander-in-chief to concentrate his army in the interior of the country, or to detach portions of it to the most threatened parts of the coast, and so reinforce the Volunteers and territorial militia. Above all, a scheme of defence taking in all Great Britain and Ireland should be established. It is only in this way that it is possible to bring all the measures introduced by the War Department in peace time into harmony with what would be required in war. And if this is not attained, we may see the War Department preparing what is not wanted, and making omissions which, when war broke out, could not be rectified for want of time.

The first consequence of the establishment of this scheme of defence would be a heavy task for the general staff—viz., the choice of the first points of concentration and the best lines of operation, the taking note of the capabilities of the railways available, and the fixing of favourable points where resistance could be offered to the enemy, even after he might have penetrated the coast zone. It would then be the affair of the Engineer department to prepare during peace plans for fortifying these positions differently, according to the time available, so that in case of need work could be at once commenced, and the usual loss of time spared. It is, of course, understood that fortifications of this kind can only be of a temporary nature, and that the time allowed for construction would be the very shortest—perhaps not more than forty-eight hours. I cannot sufficiently urge this establishment of a general scheme of defence; the advantage of it is, that it preserves us not only from incurring irreparable loss of time, but also from taking hurried and false measures. The commander of the army finds everything prepared to his hand, and it only needs his order to call the whole machinery into action.

The adoption of field fortification as a means of strengthening the positions of the army is entirely in accordance with what Colonel Jer

in his tenth chapter quotes as the dictum of the Duke of Wellington: "I know of no mode of resistance, much less of protection, from the danger, except by an army in the field capable of meeting and contending with its formidable enemy, aided by all means of fortifications which experience in war and science can suggest." It cannot remain a matter of indifference whether this means is merely thought of as to be applied in case of war, or whether the ground is already surveyed and the plans made in peace.

I readily agree with Colonel Jervois that it would be a grand misfortune to England if London were to fall into the enemy's hands; but to prevent this calamity it appears to me more advantageous to defend the coast than to erect a special zone of works which, however much art is brought to bear in its construction, can never form such a giant obstacle as the sea, or be so unassailable as many parts of the coast already are by nature. It is to be understood that I except the line of the Thames from these remarks; it should be made impossible to the enemy to avail himself of this approach, and if the works now existing in the river are insufficient, there is nothing to prevent their being strengthened and made more numerous. Torpedoes, as an auxiliary for the defence of the Thames and other harbours, will continue to be employed, but too much confidence should not be reposed in them; powerful guns are always the main thing.

If, however, London must be fortified, I would, in opposition to the view taken by my honoured friend, plead for that which he calls an indirect defence—viz., not for fortification by means of a zone of detached forts (direct defence), but for the erection of some small-sized fortresses at a greater distance from London, and besides these for a light *enceinte* near London, of which Colonel Jervois makes no mention.

Paris, Verona, Coblenz, are examples of such a modern fortress, and the opinion is generally adopted that

for the future no other system could or should be employed. "*Le système des forts détachés*" is looked on as the optimum; and if it could be said of a place, "It has no detached forts," people at once snapped their fingers at it. In joy at the discovery of this new system, which without doubt has many advantages, the disadvantages have been lost sight of.

I will not enter into the details of how much less strength a chain of works with wide, unoccupied intervals must have, than a connected line, like that of the old *enceintes*; and I will be entirely silent over the great calamity which would ensue from the loss of a couple of forts, when the rest become useless;—I confine myself here to the *personal question*; a question which, as it appears to me, has been too little considered, but which in practice is of great import by reason of its many difficulties.

In a fortress of the old style, *i.e.* one with an *enceinte* merely, like old Portsmouth, there was one, and but one, commandant. This officer could supervise everything, give his orders personally, and be always on the spot where needed. This was an advantage for the commanders of detachments subordinated to him, as they could easily refer to him, and so avoid the great responsibility of acting independently. But how very different in the case of fortresses with detached forts! Here it is impossible for the commandant to see everything: very often he must make dispositions suddenly on no other data than news just received—often very meagre; and if he leaves his usual residence, it is possibly long before he is again found. Each detached fort must have its own individual commandant, who at one time is acting under the directions of the commander of the whole, at another on his own judgment, having in the latter case to bear the full weight of the responsibility. Besides this, these commandants often labour under the difficulty of having to handle arms with which they are indifferently acquainted. They would be

chiefly officers of Infantry—men who have little experience with the weapons of the Artillery, particularly with heavy guns, perhaps have hardly ever seen one, and yet suddenly would have to dispose of thirty or more! Many undoubtedly would soon master their new position, but many not, and particularly not those who belong to the mediocrities; and as these, after all, form the majority, we must keep them chiefly in view. If London is to be surrounded by a girdle of fifty detached forts—high as is my opinion of the British army—I think it will be no easy matter for the commander to find at once, amongst the troops under his orders, fifty individuals capable of fulfilling the very difficult duties attached to the post of commandant of a detached fort, more especially as the troops will, in all probability, not be well known to their chief.

This personal question induces me, therefore, in any plan for the fortification of London, to prefer what Colonel Jervois terms the indirect system, according to which the capital would be surrounded by a far smaller number of small fortresses, each of them under the orders of an entirely independent commandant; the intervals between them being prepared as fast as possible for defence by the readiest available means. Thus London would have nothing to fear from a night attack, and obstacles would not be placed in the way of an extension of the town, as would be the case were lines erected. The small fortresses in question should be constructed exclusively for defensive purposes, offensive operations being left to the garrison and its commandant. Even if they were so far distant from each other that their guns did not command the intervals, no apprehension need be entertained of the line of these fortresses being permanently pierced, for no enemy could establish himself with a siege train on a spot to the rear of which, right and left, he knew he had positions occupied by his opponents, and armed with fortress guns.

8. PANICS.

Towards the conclusion of his lecture, Colonel Jervois speaks of the panics which periodically occur, and expresses in opinion that they will cease as soon as proper and definite plans are adopted for the defence of Great Britain.

Were measures taken in accordance with what I have stated above, I should concur in this opinion. If, on the other hand, Colonel Jervois thinks that these panics will cease simply because, instead of devoting all energies to the fortification of the coasts, London especially is fortified, I must remark that panics of this nature would be just as prevalent amongst those who have their homes outside London. But I think these panics spring from other and deeper sources. They are caused much less by a want of defensive measures than by the recent policy of England. During the close of the wars against Napoleon I., England was a Power respected and feared: the marvellous victories of Aboukir and Trafalgar, of Vittoria and Waterloo, had contributed their share to the foundation of her prestige, which lasted long after the deposition of Napoleon. England was then at the zenith of her power and glory; and because she then feared no one, there were then no panics.

A great change has since then taken place in the position of England, not in consequence of the rise of another Great Power on the other side of the ocean, but because the statesmen of England have themselves been most active in bringing it about. From the moment when dreams of universal peace began to prevail, her policy changed, and being taken for absolute weakness, gave room for aggression abroad and panic at home.

What, for example, can be thought of the conduct of a Power so rich and great as England, when, in spite of its strength and importance, she voluntarily gives up Corfu, leaving the impression on the Continent that the foreign policy of England was henceforth to be dictated by economy alone? Who in former times would ever have

dared even to mention the cession of Gibraltar? From an English point of view it will be asked, Did we not in the Crimean War destroy the Russian dockyards, and did we not, in order to liberate the Abyssinian prisoners, make a most expensive campaign? My reply is, that the destruction of those dockyards was considered on the Continent as a very tardy revenge for the seizure of the *Vixen*, and that it was Napoleon III. who set the Crimean War a-going. As to the Abyssinian War, it is known to many persons on the Continent that the liberation of the captives was not its sole object.

The power of Napoleon III. was increasing by means of the Suez Canal, his influence was taking root in Egypt, and all the efforts of English diplomacy to defeat the Canal project had failed. It was consequently necessary to do something to strengthen the position of England in these regions, and to maintain the command of the road to India.

Thus the causes which led to the Abyssinian campaign were political and commercial as well as humanitarian, although to English honour it must not be forgotten that she rescued prisoners who were not her own subjects.

If England were the only nation in the world, an earthly paradise might result from the teaching of the policy of peace at any price: each man would live solely for his own interests, much money would be made, and many pleasures enjoyed. But besides England there are many other lands, where dwell nations entertaining very varied opinions. Inmate in some of these nations there is such flexibility of character, and so much mental quickness, that events occur suddenly and in rapid succession; and as the French, the neighbours of England, have these characteristics specially, it is no wonder that the lovers of peace are periodically awakened from their dreams by events which produce surprise and panic. As long as such dreams in-

fluence public policy, there will be no cessation of panics, even though England encase herself in Sir John Brown's 14-inch iron plates, and be made to bristle all over with Mr. Bessemer's 30-inch steel guns. If English statesmen allow the present state of things to last much longer; if they do not, as regards their foreign policy, revert to the principles of their predecessors who overthrew Napoleon I., England will, it is true, remain a great commercial country, but it will abdicate all claim to the title of a Great Power, sink down to the level of a larger Holland, and possibly at some future day become the prey of the old German race, led on by Germanized Slavs; or perhaps a colony of North America. It is a source of regret to me that the above remarks contain what may wound the feelings of an English patriot. But in a question of such importance, it has appeared to me necessary to mention all that can bear upon it, not with a view to causing pain, but in order to arrive at a clear idea of what is requisite as the basis of a plan of defence. Had I not touched on these matters, I should have failed to give my readers the reasons for my opinion, and thus been guilty of an omission which I should ever afterwards regret. I should ill requite the cordial reception which has on many occasions been given to me in England, if I failed to say what I have at heart, or spoke otherwise than I think. In conclusion, I regret that my views respecting the fortification of London do not coincide with those of Colonel Jervois. The cause of this lies in our looking at the matter from different starting-points; I therefore hope that he and those who share his opinions will not on this account bear me ill-will. And I would beg of all my readers to consider me, though a foreign critic, yet as a real friend, who, far from desiring the decline, is very anxious for the prosperity of England.

VIENNA, Sept. 1872.

THE BRITISH LINE

IN THE

ATTACK,

PAST AND FUTURE.

BY

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INTRODUCTION.

THE strength of an army, like the power in mechanics, said Napoleon, is estimated by multiplying the mass by the rapidity. Fortunately for us, mass is not mere magnitude. The British Army must make up by its quality for what will always be its disparity of numbers in proportion to Continental armies.

A Prussian writer says well, "Victory remains with the side whose moral force holds out longest."* The principal elements of moral force are to be found in :—

1. National character.
2. Discipline, or prompt obedience to authority.
3. Individual skill in the use of a good weapon, and an ingrained knowledge of the exercises by which the effect of the weapon in the hands of numbers is developed.

Our neighbours, the Germans, who have the latest, widest, and most successful experience in war, are rightly considered good authorities, and any opinions coming from the profound heads which conducted their recent campaigns are to be received with the greatest respect; but, in considering their tactics, we must always bear in mind that they started with a system long deprecated by our best and most experienced heads, viz., the employment of columns, not merely under fire, but *for the attack*.

* Capt. Laymann, Instructor of Tactics, Royal War School, Cassel.

In their skirmishing, in particular, we shall do well to compare their theories with their practice. The former we shall find in their Regulations, and in the writings of their great men; and these represent the rule or highest standard. Their practice is set forth in numerous pamphlets by officers of great ability and experience, and exhibits only the nearest points which they have been able to reach.

In illustration of this, we find the Prussian Regulations, p. 36, and Von Moltkë, laying down that, "the gist of modern tactics lies in a wise economy of force;"—"not to extend too strong a line of skirmishers;"—"the rapidity of Infantry fire renders it only necessary to place immediately in front a limited number of men," &c.

The writer of Tactical Retrospect (p. 7) states that the Generals at inspections preached:—"Gentlemen, throw out very few skirmishers;—only one section, that is now as efficient as an old sub-division, let all the rest be kept well in hand." This was theory. The writer goes on to detail that the practice was the reverse of these theoretical rules,—“every one sought to give full effect to the efficiency of his trustworthy weapon; they all dissolved themselves” (*from their columns*) “into a skirmisher swarm, because in that formation the breech loader can be best used.”

Now there is something loose and unmanageable in the word “swarm,” and the same writer records how the swarm act in an attack;—"some are of opinion that discretion is the better part of valour, and that it is better not to throw dirty water away till they have got clean. Such hold back, till those who have gone before have carried the

" position, when they follow with loud shouts upon their
" traces. "

Under the head of " How is the Moral Force of the soldiers to be kept up in action ? " Captain Laymann says :—
" Should there be any men who cannot be kept up to their
" work by the example and moral influence of the Officers,
" then physical coercion, sword or revolver, must be resorted
" to without hesitation. Hence the importance of the
" supernumerary rank, in order to check the first symptoms
" of cowardice. "

These accounts manifest faults both in the material and in the system. The military profession, like most others, requires not only to be thoroughly well learned in the first instance, but constant attention afterwards " to keep the hand in. " The best drilled soldier grows rusty by a few weeks absence from duty, and it is certainly not on active service that drill is to be learned, or even rubbed up. The magnitude of the German successes during the late war was due, less to any subtle novelty in their tactics, than to their superior numbers (*the result of consummate strategy*), acting with ease and freedom against an enemy heavier in his movements, and whose leaders are stated to have been singularly remarkable for their ignorance.

A Citizen Army, as it has been termed, although a mighty engine, and working at a comparatively low *direct* pecuniary outlay, is not the one with which can best be practised that " economy of force which is the gist of modern tactics, " for where, for any reason, there is a deficiency of any of the chief elements of moral force, *it must be made up with numbers.*

●

Happily for England her sons are unsurpassed by any nationality in constitutional ability to practice that economy of force. Experience has shown that they will stand any amount of "pounding," and that they will fight, *and are manageable* in thinner order than foreign troops.

The impracticability of using columns under fire will probably be a serious matter for the Russian Army. A people's liberties, one would think, must progress for some generations, before they can produce the requisite moral force to enable them to fight in thin order. Russia, however, in her hordes of untamed mounted men, (I will not call them cavalry) has a material of which she will probably not be slow to avail herself. Armed with good rifles their numbers would render them very difficult to deal with.

The best cavalry (*as such*), of course numerically far inferior, would be driven in upon the infantry and rendered useless; and the infantry itself would be much embarrassed by a foe who assumed their functions with five times their speed, particularly if they had allowed their skirmishing to degenerate (as modern theories tend) into bodies of men in loose order put in motion with a general idea, but from that time for the remainder of the fight irreclaimable; such tactics might succeed against an enemy heavier in his movements, and acting generally on the defensive; but if they happened to encounter skirmishers who were more manageable they would find the difference; and if they came to do battle with mounted skirmishers they would be harassed or enticed out into batches, or driven up together, and in either case cut to pieces. Such a foe occupies positions, but never receives an attack; vanishes from the front

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to open an oblique fire from the flanks. From his speed he can always occupy the larger circle and bring a converging fire upon his enemy. Pursued by cavalry he breaks up into three or more bodies, and while one is being pursued the others harass their pursuers with their fire. Against such a foe, only those troops will be of avail who are as pliable, prompt, and under control when extended at six paces, as if in close order.

At this point I would say a word about the theories to reduce the proportion of officers in the infantry. That it is Prussian is a sufficient recommendation in the eyes of many. But an Englishman is not a "mild Hindoo," nor yet a man upon whom "physical coercion, sword or revolver," could be exercised with impunity. He is naturally a headstrong, free, high spirited animal, to be ruled but not subdued, and who requires a light hand but a strong one. As a soldier, he requires no poking up behind either by deep column formations, or a third rank in line (as some advocate) to get him to the front. But he *does require* to be looked after, whether as regards his health, his food, his personal comfort, or his personal safety, and to be kept up to his work.

Those who would quote the Artillery as possessing a smaller proportion of Officers, must recollect that—1st, in garrison, in the maintenance of discipline, the Artillery are aided by the larger proportion of Infantry Officers. 2nd, in field movements, a gun with its 13 or 16 *gunners** form

* In a battery there are *drivers* for the guns, wagons, spare carriage, spare horses, rocket carriage, and cart, who outnumber the gunners by one-fourth.

but one machine, while an Infantry soldier with his ammunition and rifle is a machine of himself, sometimes almost independent, whose movements, pace, extensions, and even attitude have a far more important bearing on the safety and efficiency of the whole, than the movements of the individual gunner have to the battery. The *efficient* management of two sections of these distinct machines, of which the *first arm* is composed, is as important and responsible (though presenting less to the eye) as the management of the two guns with which a Subaltern of Artillery is entrusted.*

* The following note has been written since the pamphlet was in type.

Individual skill may be unexceptionable, and utilization of cover perfect ; in these, or the *policy* of skirmishing, foreigners excel ; but it is only unity of *action* that can *ensure* success, and indeed safety. Foreign skirmishers meeting with resistance very rapidly disarrange themselves, and present one or more salient angles towards the enemy ; not *necessarily* the result of inferiority in the *raw* material, but representing as in a diagram the different grades of temperament and disposition which it is the great object of military training to bring into harmonious working. There are the daring and excitable at the apex, the cool (the most to be depended on, and perhaps the most generally useful) a little further back, and the reluctant streaming behind. As the struggle becomes fiercer *unity* of action ceases, efforts are spasmodic, and their being adequately seconded depends upon circumstances. Destroy the heads and the tails will take care of themselves. Such a form of attack, really the result of disorganisation, would be helpless against a well arranged counter attack, particularly if it were directed against the flanks. To understand why the Germans did not so suffer it is only necessary to study the opposition they generally met with, ("The moment he was in, that moment the French ran," Captain Brackenbury), and the only style of counter attack attempted by the French (Duke of Wurtemberg, p. 10—11).

Our own pliant well maintained line of skirmishers efficiently commanded and *properly* backed up holds out the best promise of success and safety, whether in the attack or counter attack. If analyzed, it will be seen that the theories of what I may call our Continental School contain less of anything new in British Tactics, than of a proposed change in our organization.

It is not urged by them that skirmishing is anything new to the British Army ; indeed the writer of the Wellington Prize Essay, who must be regarded

As to the relative value of old and young soldiers, the latter are brilliant in elan and courage so long as the movement is "onward and upward." But the old soldier (being the same stuff), by long and varied experience, has more fortitude and patience, and with an ingrained

as the mouthpiece of the School in question, points with pride to the achievements of our light division in the Peninsula, and states that the detail of skirmishing supplied by our field exercises "appears to be compiled on as sound principles, as *if all the experience of the war (Franco-Prussian), had been before the writers.*" The tactical changes proposed (so far as the infantry are concerned), seem to involve simply the question of *how to back up the skirmishers.*

But it is a poor argument for reducing the proportion of officers, that the vastly hotter fire of the enemy calls for a greater manœuvring power.

Along with the vastly increased importance of fire, the facilities and inducements for a reckless waste of it have confessedly more than kept pace; while the keeping up the supply of ammunition presents no small difficulty. It does seem strange therefore, that to adapt ourselves to such new conditions, it should be proposed to place the employment of fire and expenditure of ammunition under less supervision and control than heretofore. Under our present system (belonging to the days of *Brown Bess*), about 60 or 70 men, who may occupy an extended front of from 100 to 200 yards, would be under the supervision of a captain and two or three subalterns (*if all were effective.*) To supervise the more rapid fire of the breech-loader, now that the value of fire has so much increased that *superiority of fire is the greatest problem*, it is proposed to entrust about the same number, under a hotter fire from the enemy, to one subaltern (*who may soon be non-effective*), assisted by four sergeants. Truly it promises to be an organization likely to effect the greatest waste of ammunition with the least results.

Now that the demand for extended formations is greater, and when skill and discipline (the two elements of moral force most liable to deteriorate), confessedly under the new conditions call for greater attention, it is indeed a novel idea to think of meeting the occasion by reducing the number of officers.

If such a reduction were carried out, not only must British Infantry deteriorate considerably in pliability of movement and moral force, but until voluntary enlistment shall have been replaced by "Ballot without substitute," or until the prospects are sufficient to attract the middle and upper classes to the ranks, the whole army, affected as it would be by such a serious reduction, would be liable on service, by any check or mismanagement, to be transformed into a rabble dangerous to itself and discreditable to its country.

obedience, and knowledge of his drill, "in worst extremity," when his own "heart and eye would fail," can fall back on a second nature, and "do or die" by word of command of his Officer. In such moments, unity under one head offers at least honor, and better chances of safety than so-called "individual intelligence" without that second nature. "In the excitement of a battle soldiers "cannot be expected to think much, they must act almost "mechanically."—*Capt. Laymann, p. 8.*

Wellington, Napoleon, and the Prussians from the time of Frederick the Great, have all set a high value on the old soldier, as a safer and more trustworthy article than the young one.

The great value of good marksmen, and of rapidity of movement, to counteract in some degree the effects of modern weapons, suggests the re-adoption of flank companies, and even whole battalions of picked men, instituted in bygone days by old and experienced heads well trained in war. Modern warfare more than ever calls for the full development of physical as well as intellectual superiority.

It is quite right, to ensure cohesion in a charge of cavalry, to regulate the pace by the slowest horse, but it would be very unwise to allow the same animal to be the standard of the energy and speed to be used on special enterprises. In these days, when so much depends on rapidity and dash, we cannot, or ought not, to allow nature's gifts to be unused.

On this subject (picked men), and as illustrating the

probable value of the fire of a "skirmisher swarm," the following are Von Moltkë's views.—*Arms of Precision*, p. 5.

"The Commander will have to consider how best to
"make use of his picked marksmen. . . . in
"every battalion of Infantry there are sure to be men,
"remarkable not only for good shooting, *but also for that*
"*activity and readiness* which are indispensable qualities
"in a good marksman. . . . A hundred ordinary
"skirmishers, without proper supervision, will generally
"under-estimate the distance or deliver their fire hurriedly
"or excitedly, and the result will probably be no greater
"except as regards the expenditure of ammunition. . .
"A man left to himself, with the power of using 60
"rounds of ammunition in 20 minutes, will undoubtedly
"do so in the excitement of the battle: it is evident that
"the power must be controlled and regulated and the *full*
"*use of it only entrusted to the good and steady soldier*. For
"however useful this power of rapid firing may be *in the*
"*hands of a leader who knows how to employ it at the right*
"*time*, it becomes absolutely dangerous in the hands of
"the *ordinary* private, over whom there is no supervision."

Arms of precision have led to vast improvements in firing, and the next invention which is likely to add to the improvements, and to achieve great things for those who first adopt it, is the use of cotton gunpowder, which, according to all the leading journals and many distinguished and reliable authorities, is as efficient and rather more controllable, both to manufacture and to handle, than ordinary gunpowder.

Every sportsman has been annoyed and baulked at

some time or another by his own smoke or his neighbour's, and few men who have seen active service but know how puffs of smoke have guided the eye to the enemy's cover, or how an enemy's whole position is clearly defined by his fire. On the other hand, how often has a shot from behind cover brought the enemy's bullets rattling unpleasantly about it? To the assailant's skirmishers the adoption of cotton gunpowder would be of immense service; except when on the move it would be difficult for the enemy to find them, and their advantages of course would be relatively vastly increased if the enemy were obscuring his own vision, impairing his aim, and betraying his position by using ordinary powder. If used by troops on the defensive, the task of an assailant who employed ordinary powder would be very close to "the impossible." In fact, the employment of cotton gunpowder would so enhance the disadvantages of ordinary powder, that if one State adopts it all others must follow; but in the absence of such a stimulus as smoke, the amount of moral force demanded would be so much greater, that battles would be of shorter duration, and, if something further could be invented that would act without noise, they would, perhaps, be restricted to those who were prepared coolly and deliberately to risk their lives for some great principle or cause.

THE BRITISH LINE IN THE ATTACK,

PAST AND FUTURE.

FUNCTIONS OF INFANTRY—Infantry possesses two descriptions of force which it may exert against an enemy, viz., *fire force*, and what may be called its *charging force*.

Fire.—The ready development and effective exercise of the former should be the main object of all battle formations. It opens the way to a resort to the latter should the enemy live and wait for it.

The Charge.—The employment, by Infantry, of the charge, which is intended to bring its muscular force and weight in contact with an enemy, will now probably be seldom required. It would be absurd, however, to assert that circumstances could never occur to call for its employment. Bodies of determined troops might find themselves within a short distance of each other; failing ammunition on both sides, surprise, accident, or neglect might bring it about. Firing alone can never settle a battle, and though as a means to an end it should be used to the utmost, the temptation is now so much greater than formerly to spend precious time at long distances, and to blow away ammunition whilst objects are still very indistinct, that it must be impressed upon the soldier as strongly as ever, that, whenever battle is offered and accepted, close quarters with the enemy is the great desideratum, whether the enemy elects to come to him or he has to go to the enemy. It would manifestly be absurd to sanction the doctrine that if

the defender won't quit his position the assailant must not go on, or that if the assailant persists in coming on the defender is bound to leave.

GENERAL CONSIDERATIONS FOR THE ASSAILANT.

Direct Attack—the Important Problem.—The simultaneous turning of both flanks of a position, “compared to the action of a pair of tongs,”* or, indeed, the turning of one flank, should be as hazardous as ever, unless consummate strategy or good fortune has provided the assailant with enormous odds. The flanks, moreover, might be inaccessible; so that, in considering the offensive, the direct attack is still the important problem in tactics.

What the Assailant may have to encounter.—To discuss fairly and practically the probabilities of success of a proposed formation for the attack upon an enemy in position, the defenders should be accorded credit for the best of everything. What falls short of this will be a gain to the assailant. There will be, therefore, only under consideration, the attack upon a formidable enemy, whose position with a clear open front would allow him freely to assume the offensive†—an important condition for the complete success of a defensive fight.

“Good troops are not to be driven from their ground by appearances. Superiority of fire, pliability of movement, undisturbed steadiness, and persevering courage, are the great grounds for probability of success,”‡ whether for attack or defence.

Business of the Assailant.—The business of the assailant may be divided into two parts. The serious part of the attack, or “*attack proper*,” which *should* extend across a space of say 300 or 400 yards in front of the enemy's

* “System of Attack,” P. I., p. 20 (translated by Captain Robinson, R.B.)

† Otherwise it ought to be turned.

‡ “Crisis of Waterloo,” p. 39, by Major Gawler, 52nd L. I., Dublin, 1833.

position, but which must be measured from the time the assailant first comes under fire at any distance under 400 yards; and the "*advance to the attack*," over ground which the assailant must cross, more or less exposed to fire, before reaching the borders of the space above named.

OLD AND NEW FORMATIONS DISCUSSED.

Heavy Columns.—Albuhera, Waterloo, and the Alma furnish instances of the fate of heavy columns, whether on the offensive or defensive, when opposed to the fire and charge, or fire only, of steady troops in line, before the days of breech-loaders. The hill of Solferino indeed was carried by deep French columns, but at immense loss. Their fire, *not their weight*, and repeated reinforcements of course prevailed over limited numbers, for the post was *advanced and difficult to support, and was moreover turned before it was taken*—see *Hamley*, 1st Ed., p. 343.

Jomini's proposal adopted by the French.—Since the introduction of arms of precision, Jomini, recognizing the importance of a good front of fire, and to diminish to what he considered the utmost the losses which would be inflicted by the enemy's Artillery, recommended, and the French adopted in the Italian Campaign of 1859, battalion columns of 3 divisions each (*i.e.*, a depth of 6 ranks) at deploying interval, the advance to be covered by skirmishers—*Hamley* 392.

Von Moltke's Views.—So late as 1865 (*i.e.* since the adoption of breech-loaders by the Prussians) Von Moltkë, having described with much force the marked success which attended the employment of the Line by the English at the Alma against the Russian columns, concludes that "the column formation affords the best means of handling

"Troops both in an attack and in an actual fight!"—*Arms of Precision*, p. 13-15.*

Had the Russians received the English in line well supported, the relative losses, as mentioned by Von Moltkë much to our advantage, would not have been so disproportioned. And in that case also we should scarcely have improved our chances by attacking in column.

In the account quoted, Von Moltkë certainly describes the superior advantages of the line, but by the inference which he draws he would seem to doubt its practicability with German Troops.

German Experiences.—The introduction of breech-loaders since the Crimea (but not since Von Moltkë wrote in 1865), to say nothing of the mitrailleuse, has still further added to the importance of fire. Breech-loaders being in use on both sides; for the assault of St. Privat, "across open and gently ascending ground," the Prussians formed two lines of columns, covered by skirmishers. "The front of the attack included little more than 2,000 "paces, so that there were about 10 men to the pace" (*i.e.* 20,000 men, 8 ranks deep), deeper therefore than the columns recommended by Jomini before the introduction of breech-loaders.

Having lost nearly 6,000 men in 10 minutes, when about 1,500 paces from the enemy, the advance had to be discontinued. This was a sufficient lesson:—"the attack "in line of columns over open ground was in spite of the "final success† (?) of this one marked out as an impossibility, and a useless loss of men, and definitively "rejected."—*System of Attack P. I.*, pp. 17-18.

* Translated by Lieut. Craufurd, R.A.

† It is stated that the attack was not renewed "*until the Saxons were ready to turn the enemy's right flank*" (*ibid.* p. 17). It cannot therefore be considered as a success for the column.

Recent English views.—Hamley, though with a seeming affection for the British line, hesitated to oppose the opinions of the French and Jomini as to its impracticability, and finally backed the column with this assertion, "Wellington's battles throw no light upon the question, "for his method was to await the attack, and then in turn to "attack the repulsed enemy so that his line advanced over "a narrow space against a broken enemy,"* which is tantamount to saying that the Duke of Wellington never fought an offensive battle.

MORAL EFFECT v. REALITY.—The construction of the column, being a head diminished in width in order to lengthen its tail, is a vast reduction of the *fire power* of a given number of men, which has its fullest development in line.

Physical Power.—Apart from its fire power, the line has a physical superiority over the pent up forces, even of superior numbers, of the more imposing looking column.

The *momentum* of a battering ram (the velocity being the same in each case) would be the same whether used "broadside on" or endways, only in the one case the blow would be distributed over a large surface, and in the other it would be concentrated on one point. Front for front, therefore, in a mere pushing match, the long tail would have the best of it, but though the narrowed space admits of increased *weight* being directed towards a particular point, the reduction of front renders particularly vulnerable the tail which supplies the momentum.

But this is only measuring the physical force of Troops by lbs. weight; the fact being that each atom of which a body of men is composed, possesses within itself a force which inanimate matter does not. The line allows the

* "Operations of War," 1st Ed., p. 391.

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exercise of this force to the full, and is therefore the formation in which both the forces which Infantry possesses, viz., fire power and physical force, have their largest development.

Mere weight is dissipated by fire; appearances go for nothing against good troops; and bad troops will certainly yield to realities as readily as the best.

The saying that the greatest numbers at the decisive point win, was always only half true. Their formation and management must be such as to admit of the greater numbers using their powers.*

* Since the foregoing was in type, my attention has been called to the following passage in the "Wellington Prize Essay."

"Under all previous conditions of tactical action, the army which surrounded another without a most unusual numerical superiority, had exposed itself to the risk of disaster if not of destruction. No very recondite reason lay at the bottom of this fact. The surrounded army could always attack its enemy at some point with superior numbers. Yet almost to the last man, the last horse, and the last gun, the French army passed into captivity, because every portion of it had been in succession literally surrounded A General so able as Count Moltke would, under no previous conditions of war, have allowed the course of events to lead him into exposing his army to the risk of such a situation. When we know who the leader was, the mere map, with the position of the troops marked on it, is well nigh sufficient proof that a vast change has taken place in the application at least of our present principles.

It is only the former advocates of the attacks in column (to which class Count Moltke once belonged) who are placed in this dilemma, and in whose principles the vast change is demanded.

If we are content to study our own experiences under that practical and sagacious man the late Duke of Wellington, we shall see that recent events on the Continent have merely confirmed the principles of the line, contrasting them sufficiently to make them apparent to that continental school of tacticians for whom the French used to set the fashions.

Improved weapons call for *modification*, but there is *nothing* in these "surrounding tactics" which, under the circumstances, occasions surprise or calls for any change of *principles* among the advocates of the line. A surrounded army might indeed "attack its enemy at some point with superior *numbers*," but not with superior *fighting power*. The front of any attacks single or combined, which the army on the smaller circle could make, must be inferior to that of the circle enclosing it. The best approach to equality with its adversary which a force so

OBJECTIONS TO THE LINE.—Continental authorities, followed by some of our own, while acknowledging the power of the line for the defence, and admitting that an advance in that formation would ensure the least loss, excused themselves from recognizing it as suitable to the attack, alleging the impracticability of moving a large body of troops in line for any distance in anything like order, and urged the mobility of small columns, and the superior order in which they could be brought into contact with the enemy. Such writers overlooked the use and mechanism of the line. If their proposed columns were intended to deploy before entering upon the *attack proper*, well and good. But if that were to be delayed until the stubbornness of the defenders became manifest, the attempt would probably prove abortive, for they being already deployed are in a position to prevent such movements being executed so immediately in their presence. The adoption, under any circumstances, of column as a formation of attack against line may be com-

beleaguered could make, would be by recognizing the principles of the line, and its chances would be more remote according as it deepened its ranks at the expense of its fighting front. The mission of the six or eight rear ranks of an attacking column was never very apparent, unless, indeed, they were required to impel and stimulate a reluctant front. The Germans had been gradually prepared to secede from the Jomini and French school of tactics, and St. Privat assisted materially to complete the separation. Count Moltke saw that the French were not so prepared, and in surrounding them he did homage to the *principles* of the line.

These opinions are in perfect accordance with the statement at p. 2, that "the turning of one or both flanks *should be* as hazardous as ever."

It *ought* so to be, and, that in the late war it was not, is owing to the French having nothing to substitute for those principles which the British army long ago rejected, but, into adopting which, many teachers have constantly tried to seduce it.

"Surrounding tactics" must not be mistaken for a *principle*, as might result from the manner in which they are noticed in the Essay referred to. They are only safe when brought into contrast with the opposite extreme.

pared to the assailant's presenting himself at the critical point with the bulk of his force tied up in travelling bags.

The object of treating at such length much that is now undisputed, is to show how unsafe it is to pin our faith on the opinions of foreigners. It must be recollected that they, followed by some of our own writers, maintained their views with regard to columns (*and heavy columns too,*) up to a very recent date, long after the introduction of arms of precision; indeed, until they were washed away at St. Privat in the blood of 6,000 men. Even then the conviction was not complete until time had allowed reflection. "When at length the news arrived of the brilliant storming of St. Privat by the Prussian Garde—bloody though it was beyond precedent—there seemed to be no longer a doubt that even, when opposed to the breech-loaders, the old charging tactics formed the only method of attack calculated to ensure victory. The general voice of our own, as well as of the Russian Army, rejoiced that the old cherished system of charging in masses, which had been displaced by the breech loader, had returned triumphant, and been reinstated in its proper position"!!!—*S. of A. P. I. pp. 5-6.*

Objectors seem to imagine that it was necessary for the success of the attack in line, that, say, 20 battalions, forming a line of nearly four miles, should march up "like a wall," and charge simultaneously. But these are not at all the principles laid down in the Field Exercises, p. 244, para. 10. The functions for which the line was primarily esteemed, according to a Peninsula officer, were its "*superiority of fire and pliability of movement;*" and as to the fact of its employment in the attack, the following is the testimony of the same authority:—"Foreign military writers generally appear to consider it impossible to advance for long distances in line to an attack. With British soldiers and

“ British discipline, the possibility of it *was proved over and over again in the Peninsular War.*” (*Practical lessons from crisis of Waterloo*, p. 40)

METHOD OF USING THE LINE.—In the Duke of Wellington’s battles, corps, brigades or divisions, sufficient for the front to be attacked, marched independently (though keeping up a connection) by the most suitable routes, well timed, and in the formation best adapted to the ground they had to traverse; always deploying, generally covered by skirmishers, before attacking. Although precision is always the aim, a little waviness in the line, overlapping, the error of a few paces, or a few seconds difference between battalions, does not impair the fire, nor diminish the effect of the shock, so long as each unit keeps in good order and engages the enemy in time to maintain the vibration. Although precision must still be strenuously inculcated, the extended range and rapid fire of modern arms render errors of distance, &c., of still less importance.

Abuse of the Line.—In practice, the use of the line has also been mistaken whenever it has been marched, unprotected, under fire against an enemy, from beyond charging distance. Unassuming in appearance, it never was a machine to be so flaunted before an enemy. It should be jealously protected until the last moment, and produced only when it can be felt. We have instances in India of Regiments suffering severely in such parades, and one famous instance of a Regiment which was marched in line against a battery; whereas, in the Peninsula, a section extended was considered equal to that duty.

SKIRMISHERS AND OPEN ORDER.—The other extreme now to be avoided, is the wide-spread theory that skirmishers and their supports are sufficient to carry a position against good troops.

Line possesses the greatest "fire power," as well as the fullest development of physical force, and if it be held that extended formations (both sides being equally armed and courageous) can penetrate it, it would have to be explained what the extension should be, in fact, what inferiority of force and fire must be employed to ensure the success of this anomaly. If it be urged that the "skirmisher swarm" would be numerically equal, or even superior (as seems really to be the theory) to the line, then it may be asked; within the same space, what subtle advantage has disorder and diminished control over order, that such happy results should be anticipated?

German experiences with Open Order.—Field Marshal the Duke of Wurtemberg under the problem,—"it would be impossible however to entirely avoid attacking on open ground, and to gain the object by turning the flanks alone, particularly in the case of great battles; it was therefore necessary to discover another form of attack,* records as a practical solution the method adopted at the taking of Le Bourget, 30th October, 1870, and states "the attack in open order, joined to the attack of skirmishers, was from that time adopted as the only efficacious one, and it was strictly forbidden to lead bodies of troops in close order, within a nearer distance of the enemy's fire than 2,000 paces.†

But this taking of Le Bourget, though exhibiting a very good method (not novel to us) of getting over the ground under a hot fire, is not, as it professes to be, an instance of the success of the loose and open order in a direct attack against good troops in position. It was the attack on an outpost. The object of attack was a village, with garden walls six feet high, loop-holed and prepared for defence, and

* "System of Attack," P.I. p. 27.

† S. of A. P.I., p. 29.

the entrance barricaded. Very different therefore from a position whence an enemy could use his utmost fire power, and then freely resort to the offensive. Moreover, so far from its being a *direct* attack, the flanks were (very properly) turned, and it was broken into from the rear.*

Causes of success.—The success of the loose and *very* extended formations, adopted by the Germans in their attacks on positions at the *end of 1870*, and *beginning of 1871*, (S. of A. P.I. p. 37-38) was certainly owing to the demoralisation of the French, and the raw levies which had filled up the gaps in their ill-provided army. Circumstances fully justified the system then adopted by the Germans, but they would scarcely have ventured to adhere to it if they had been called upon to fight the tough warriors of Gravelotte over again.

The success of the loose, though less extended, attacks by the Germans on some occasions in the early part of the war was due greatly to their numerical superiority, enabling them frequently to turn one or both flanks, and much to the application by the French of the opposite extreme in endeavouring to repel them. "With daring courage, great activity, and unparalleled elan, *densely massed groups*, "starting from behind their cover, threw themselves upon "the enemy, interfering by their forward rush with their own riflemen." (S. of A. P.I. p. 10.)

Reasons for adopting the "Swarm."—As has been already observed, foreign writers, copied by some of our own, advocated deep columns to a very recent date. Jomini tried to make a compromise between the column and the line. Von Moltkë apparently admired the line but hesi-

* "The attack was undertaken from three sides. The attacking left wing "succeeded in making good an attack of skirmishers up to the garden walls, in "silencing the fire from them, and in breaking into the village *both from its "flanks and rear."* S. of A. P.I. p. 29.

tated to adopt it. The war caught the Germans in their columns, and they got some startling lessons. It was too late to practice the line, or to get their skirmishers better in hand, so, with admirable good sense, they adopted the "skirmisher swarm." Their national enthusiasm being at the highest, and having good discipline, admirable arrangements, first rate strategists, and superior forces, they succeeded. But had they been able to adopt the line, they might have achieved the same with half the numbers, and at considerably less cost of life.

Duties of Skirmishers.—Extended formations (not "swarms") are indispensable to open the attack, cover the approach of the real attack, and to sting the enemy into active resistance. Inferior troops indeed might decamp under the skirmisher's attack, but a well posted line of steady troops lying down (perhaps behind shelter trenches) until the right moment, properly supported, only a due proportion firing, or having perhaps a separate covering of skirmishers, would not be dislodged by loose formations or "swarms," even if backed in addition by the desultory attacks of small closed bodies. Against such *there must be at hand* to back the skirmishers, and to reach the critical point,* a body possessing that highest combination of fire power, physical and moral force, and pliability of movement, which the line alone affords.

THE SWARM *v.* SYSTEM.—The question at issue now between the "swarm" and any other formation seems to be:—

1. The relative ability to maintain, from moral or

* By the *critical point* in an attack is here meant that point or distance from the position which being reached by the assailant, the most stubborn defenders are *obliged to begin to rise*, and the fighting terms are for the first time equal. This I should estimate at about 100 yards, if there are no trenches. (Inferior troops might rise too soon, and would throw away a manifest advantage.)

physical causes, an advance which shall bring them to the critical point.

2. The relative ability, from the condition in which they reach that point, to cope with an enemy whose order is little, if at all, disturbed, and who has been comparatively little injured by fire.

Dealing first with the last proposition, one is bound to believe that there can be no choice as to which body (allowing that it had once reached the critical point) would have the best chance of success; a line, with its highest fire power, its moral and physical force as a closed body, and its pouches full, or the "swarm," whose fire power *could not be greater*, with its acknowledged inferiority of moral and physical force, and its ammunition more or less expended?

Under the first proposition there can also be no doubt that (the protection from the enemy's fire being supposed equally good in both cases) the superior moral force and controlability of a closed body would enable it to maintain its forward movement, and would exercise a moral influence over the skirmishers that covered its advance to do the same, with infinitely more certainty than what must necessarily be the spasmodic and disjointed efforts of "the swarm," whose flagging zeal it is proposed to stimulate by repeated reinforcements, which will add to the numbers exposed, and get more men "out of hand,"* but which (*the same material and numbers being used*) can never make the moral or physical force of a "swarm" equal that of a closed and well organized body.

It follows then that the swarm requires considerably superior numbers to bring its moral and physical force on a level with the line.

* To better all this confusion it has even been proposed to reduce the proportion of Officers by about one-half.

Required, therefore, a certain amount of moral and physical force during an advance and at the critical point :—no one, it is believed, will be bold enough to contend that superior numbers advancing as a swarm will be exposed to less risk than a smaller number progressing systematically.

CONDITIONS OF THE ATTACK CONSIDERED.

Conditions of the Attack.—To advance is of course a condition inseparable from the attack. The first object of the attack is to gain ground. To destroy the enemy, if he resists, is only the second.

A rapid advance shortens the affair, and tends by the varying distance, if not by moral effect, to spoil the enemy's aim, and for both these reasons diminishes the losses of the assailant. Nevertheless, a simple advance without protection, even across a comparatively short space, is, in the face of modern fire, hazardous.

Modern Improvements favor the Defence.—The improvements in modern fire-arms are mainly :—

1. Range increased from 200 to 900 yards with greater precision.
2. Loading can be effected without exposure.
3. Rapidity of fire increased three-fold.

In the days of smooth bores, the assailant, except for the fire of Artillery, might approach with comparative impunity to within 200 yards of an enemy's position. By the method of loading the defenders were obliged to expose themselves. They might be *kneeling*, but as the distance remaining to be surmounted by the assailant before he was within charging distance was very trifling, they were more generally standing, and therefore the terms were more even. Under these circumstances the defender

had no time to fire many rounds, and the affair, begun late, was soon settled in one way or another.

But the affair is now begun at 900 yards (if the defenders have been able or have had the sense to choose proper ground), and the assailant must move all that distance under fire; while the new system of loading allows the defenders to carry on their fire, even in the open, with a mere nominal exposure.

The effects of the 3rd improvement are not so apparent. The hits are not in proportion to the larger number of rounds fired, because there is three times as much smoke, and three times as much noise, and consequently more excitement. The terrible effects of rapid fire must be exhibited principally, *under strict supervision*, at *short* ranges, say 200 yards and under, at distinct objects, when men cannot well miss.

Aimed and Unaimed Fire.—The fire of the defenders tells upon the assailant in “aimed” and “unaimed” fire. Against the “aimed fire” troops find protection, observes Major Tellenbach, “by taking advantage of ground, *“lessening the size of the mark,* loose touch, slight depth, *“and motion ;* from fire not aimed or badly aimed at them, “chiefly by avoiding the shot sphere as far as possible, or “if they are obliged to delay in it, by seeking out the “places where the shot fall least thickly.”*

Under “aimed fire” the chances that any number of men run of being hit may be *generally* stated to be in proportion to the *intensity* of the fire and its *rapidity*.

The intensity of fire from a given number of men may be called *medium* when it is direct (or when their lines of fire are parallel), less when it is divergent, and greater when it is convergent.

* “Art of operating under the enemy’s fire,” &c., translated by Capt. Robinson, R.B.

It has been found that the common inclination is to fire at the centre of an object, where it is therefore more *intense*, and hence it is better to bring up supports in rear of the flanks *of such object*.

Herein lies the pith of the reason why loose order is a protection against *aimed* fire. Because the more open order invites the more direct or even *divergent*, *i.e.*, less *intense* fire; the closer order, *i.e.*, *as the men form an object*, invites the *convergent* or more *intense* fire. Thus if 100 men in line are firing at 25 advancing towards them, the fire will be *convergent* or *intense* if the 25 are formed in a body; but if the latter extend themselves, say 4 paces, they will occupy a front rather wider than their enemy; they then offer no special attraction, and therefore invite a direct or less *intense* fire.

One great safeguard therefore for those exposed to aimed fire is *to equal the enemy's front*.

It has also been observed (Major Tellenbach, p. 19) that "the bottoms of defiles are as a rule heavily swept by fire, "the sides or slopes much less heavily." This is probably owing less to any inclination of men to prefer firing into a hollow to firing straight to their front, than that because the lines of defence across the head of the hollow or defile would be re-entering, producing therefore a convergent fire at the bottom.

The common fault in firing is that it is too high.

As regards the "unaimed shot sphere," it is the space within which those bullets fall which have missed their mark, or which have been more or less blindly delivered. The breech-loader offers great facilities for making plenty of smoke and noise, which men dearly love in proportion as they lack nerve and discipline, and it is found that there are created in various parts of the field bullet storms of various dimensions through which it is dangerous to pass. The French "Moulin a Café" was just the system to make

these storms dreadful if encountered, while actual contact with a foe so educated would be comparatively insignificant.

It should also be noted that at the long ranges the unaimed shot sphere will probably be very close in rear of the mark, while at the short ranges, if the Defenders are lying down, it will mostly be at a very considerable distance in rear.*

If a whole front were evenly engaged, the unaimed shot sphere would probably be a continuous strip in rear of the assailants; if there are several attacks it also will be in patches.

It is important to observe that in passing through the "*unaimed* shot sphere," speed alone can diminish the risk of loss.† Avoid it or cross the least intense portion of it, if such be possible, but *formation* can affect the question in no way whatever, *except as it may affect the speed*. Bullets are flying at a given rate within certain limits, and if *all must* pass through those limits, the individual chances are not affected by being in company. It would be otherwise reasonable to assert that a body of men marched through a shower of rain in skirmishing order would be reached by fewer drops, *i.e.*, would get less wet, than if they passed through *at the same pace* in column, or that you would get less wet walking alone in the rain than you would do in company with a friend!

MEANS OF NEUTRALIZING THE ADVANTAGES OF THE DEFENCE.—Improvements in fire-arms having multiplied for the defenders advantages: which remain largely in their

* A man lying down firing at the breast of a man advancing on level ground would be firing up a plane oblique with the horizon. Hence it might be well to instruct men when kneeling or lying down to aim, when at point blank range and under, not at the breast, but at that part of their enemy's body which is on a level with their own shoulders.

† Attitude must be added, if, as will generally happen, fire is less intense nearer the ground.

favour until the assailant can reach that point when for the first time he will be on even terms, *i.e.*, when they must rise to repel him: it is for the latter to consider what means there are of neutralizing those advantages.

The advantages in favour of the defence may be neutralized, directly or indirectly, more or less, by some of the following means:—

1. Ball-proof cover, as walls, ditches, undulating or broken ground.
2. Concealment by fog or darkness.
3. Mere concealing cover, as hedges (*i.e.*, with neither ditches nor banks) and underwood.
4. Keeping the enemy otherwise occupied.
5. Formation.
6. Attitude.
7. Speed.

Of these as regards:—

- No. 1. If the defenders are wise none will be available.
2. Fog not always present, and together with darkness not generally suitable.
 3. Of use only while the enemy is unaware of its being occupied, otherwise dangerous.
 - 4, 5, 6 and 7 are the only means constantly available and in the power of the assailant, and are therefore principally to be considered.

KEEPING THE ENEMY OCCUPIED.—The first important means of protection for the assailant is to oppose fire by fire; just as in storming a breach the protecting fire of a covering party is necessary while the stormers are crossing the ditch and mounting the ladders. Firing has a double application, *viz.*, to destroy the enemy and to deaden his fire. Wild unnecessary firing cannot be too strongly condemned—while doing the enemy little harm, it tends to embolden him.

To attain a superiority of fire at the point of attack is one great problem for the assailant.

Aiming.—Men who aim well, whether from habit only, or from natural coolness, will soon quell the fire, even of superior numbers, of those who have not such qualities. The fire of the latter (if they do not run away) will probably become more rapid, but the muzzles of their rifles will rise as their heads sink gradually behind their cover, and the bullets will fly harmlessly over those for whom they were intended.*

Firing obliquely with the Line.—Every one acquainted with the use of fire-arms knows that fire is delivered to the left front of the individual. In fact that to fire to his front a man makes a right half turn or brings up his left shoulder. The front rank of a closed body can fire to its left front as easily, as rapidly, and as correctly as to its front, and the fire thus delivered is, in proportion to the acuteness of the angle, more *intense* than direct fire. This is worth remembering, both on account of the important aid which, without disturbing the front, can be rendered by one body of men to another on its left which is either attacking or receiving an attack; as well as that *when there is the choice*, it is always better to attack the right front or flank of your enemy than the left.†

Oblique Fire against the Enemy.—On the same principle as with artillery fire, firing obliquely, when it can be adopted against an enemy, will be much more effective than direct fire, *particularly against troops in loose order*. If a handful

* Of two bodies under a hot fire, the aiming of those under cover is notoriously inferior, because they have the strong temptation so close at hand of proffered safety, to neglect their aiming.

† The 52nd at Waterloo, obliged by their position to attack the column of the Imperial guard on its *left* flank, were exposed to a very hot fire from its flank files and suffered severely. Had they been able to attack the *right* flank the French would have fired very awkwardly and their disorder would have more quickly ensued.

of stones be thrown at a line of open railings, where, according to the space between the railings (the size of the stones being the same in each case,) only one in four perhaps, or less, would hit when the throwing was direct, all would hit if thrown at an angle of 30° with the line (*supposing it to be of sufficient length*).

FORMATIONS.—Reverting to the remarks at p. 16 on “aimed fire,” it may be observed that it would be a difficult thing to inveigle an enemy into delivering a *divergent* fire, but it would be very easy to draw from him a *convergent* one. The best course therefore for *the troops immediately engaged with him* is to strive for a general average, or “*medium*,” by offering no *inducement* for a convergent fire; preserving a formation so uniform that no part of it shall attract his eye more than another. Skirmishers therefore should be drilled as heretofore into maintaining this even line, and to avoid getting into knots and clumps, *which inevitably attract a convergent fire*. Cover, *that is in their road*, should be made the best of; but, as it (as well as fire) is only to be employed as it may aid towards attaining the main object, *gaining ground*, any resort to it which would break the line or check the advance must be avoided. This is generally the commencement of getting into knots; it is very easy to get into these clumps and very difficult to get out of them. And if the enemy cannot hit these groups while under cover, he can at least watch for them as they break.

The most efficient skirmishing line, therefore, is that which allows *every* individual composing it to combine ease and rapidity of movement with the best use of his weapon. It should never be so thick as to risk more men than can find honest employment, nor so thin as to draw the enemy’s attention to individuals; single rank, therefore, and the extension, whatever it may be, well maintained; or *the formation least resembling a swarm*.

Of the Formations of those who back up the Skirmishers.

—*Supports in Single Rank.*—As being nearest the skirmishers, supports should move in single rank. Extended over the larger front they would be as well or better able to reinforce the skirmishers, and if they happened to come under the aimed fire of the enemy, the more extended front would be preferable. The rear rank might be used either to extend the front, or it might be echeloned in rear of one or both flanks.

Line two deep.—Line two deep is suitable to the greater fire power, deliberation, determination, and order required of the body prepared to take the enemy in hand at the "critical" point. Until then it should not come under the aimed fire of the enemy's Infantry.

Four deep.—A third formation is four deep, which, *with two front ranks kneeling*, represents the greatest intensity of Infantry fire. It is suitable principally for defensive purposes and for second lines. The four deep formation was used on a memorable occasion in our military history, viz., by the late Duke of Wellington, to meet the last great efforts of the French at Waterloo.

"The Duke had perceived the concentration of heavy columns to the right of La Belle Alliance, and to oppose a more solid resistance to the evidently approaching attack, had ordered all the Infantry Corps between the two great roads to be formed from two deep into four deep lines." (*Crisis of Waterloo*, p. 13.)* With what result is known.

One Regiment had the left wing doubled in rear of the right. Another formed the four deep line by wheeling up from half column by half companies to the left. The double line of companies would probably be the better

* It is probable that the Great Duke had an eye as well to the greater concentration of fire as to the increased solidity. But the movements of the French prevented his object becoming fully manifest.

formation, six paces being preserved between the lines. If the whole fire were required, the rear companies would close up and the front companies would kneel, their supernumerary ranks turning outwards and moving to the rear as in a four deep square. The advantages of this formation compared with the two deep line are :—

1. Greater mobility, with the whole fire available if required.
2. Fire more concentrated. The same amount being available in half the space.
3. Readiness to thwart a flank attack without diminishing the front by wheeling up a rear company.
4. Formed in half the time from column.

Compared with the Jomini column the advantages are:—

1. An extent of front (for British Regiments) equally manageable. The front of the columns used by the French in Italy (100 men), it would only exceed by one-half, in battalions 600 strong.
2. No fire sacrificed, and therefore no delay necessary for deployment.
3. One-third less depth offered to the enemy's projectiles.

It may, of course, at any time be partially or wholly deployed into two deep line to fill gaps or for other purposes.

These closed formations are orderly bodies upon whom the skirmishers can depend, and whose presence infuses a moral force into the whole, and ensures an orderly and steady advance.

They should be kept as much as possible out of the aimed fire, and if the skirmishers work well and avoid as much as possible everything which would draw a convergent fire (which makes the "unaimed fire" hot also), they have no unusual risks to run. In any case, however, their

extended front, uniform slight depth, and pliability, provide them with the best general chances against sudden or unforeseen risks from aimed or unaimed fire.

ATTITUDE.—In crossing open ground under fire, the attitude of the soldier is of very great importance. A man of 5-ft. 8-in. may, by stooping, take nearly 2 feet off the top of the target which he would otherwise offer to the enemy, and be able to move without inconvenience. What lover of wild sports has not compressed himself into the smallest possible compass, walking and running for a length of time till every muscle has ached? The men should be drilled to this, and, when under fire, all dashes across exposed places should be made in this attitude.*

SPEED.—On this subject, and the general method of getting over the ground, the following appeared in an English military work as early as 1852, on the first introduction of the Minie rifle. "All movements of skirmishers, "under fire of a well-posted enemy, must be at the double—"quick to avoid ruinous destruction. If the distance cannot "be surmounted in one effort at such speed, it must be traversed by successive dashes to intervening cover;" also, "exposed to the long range it would appear that supports "will be often obliged to loosen into extended order." (*Essentials of Good Skirmishing*, 2nd Ed. pp. 21-38.†) This was the essence of the plan adopted by the Prussians at Le Bourget.

THE ADVANCE TO THE ATTACK.

Skirmishers.—In the "*Advance to the Attack*," i.e., at the long ranges, the skirmishers should be comparatively few. Very little of the enemy is visible, and to produce any appreciable effect, physical or moral, firing at such

* The men should be supplied with knee-caps for both knees, which would enable them to move on all fours for a few paces, under a very hot fire.

† By Col. Gawler, late 52nd L.I.

distances requires deliberation and judgment. The temptation to the skirmishers to throw away fire is much greater now than formerly. It is better to get over the ground to the borders of the "attack proper," than to waste time and ammunition, and increase noise and smoke. They may be reinforced, however, if circumstances demand it, and should be doubled at point blank range.

Bodies in support.—The ground most favourable to the defenders, i.e., the clear open front, would, if the enemy were kept well occupied, be most favourable to the advance in line. If the front were not clear and open so much the better for the assailant.

Officers commanding divisions, brigades, regiments and companies, each within the limit of their command, possess the power of altering their formation, and increasing or diminishing their front to suit the conditions of ground, and they must exercise their judgment in the same way in regard to the enemy's fire. Our own military history is fertile in instances exhibiting the readiness and pliability of our troops, and that there is nothing stiff in our system, or opposed to the exercise of intelligence.

The following is an instance of a regiment crossing open ground and a defile swept by fire. At the Nivelles on the 10th November, 1813, "the line of the French main position was in front of the regiment with an intervening rocky water-course, which it would seem was deemed impassable by our enemies. The 52nd moved by threes to the small open ravine and wood in their front under a smart fire of artillery from the ridge which was next to be assailed. In front of this wood, the watercourse was crossed by a small and narrow stone bridge, on the opposite side of which was a road running parallel to the watercourse, with a sheltered bank towards the enemy. The officers and men of the 52nd crept by twos and threes

"to the edge of the wood, and then dashing over a hundred yards of open ground, passed the bridge, and formed behind the bank, which was *not more than eighty* yards from the enemy's entrenchments. The signal was then given, the *rough* line sprang up the bank, and the enemy gave way." (Records 52nd L.I., p. 219). Order is the rule, and such circumstances demand exceptional measures. Under modern long ranges such cases will occur more frequently.

The nature of the intervening ground and the enemy's fire must determine the question. That formation will be the most suitable which will enable the assailant to traverse the intervening space with the least loss, in the best order to guard against interruptions, and from which he can form line most readily before entering upon the arena of the attack proper.

Even the Prussian "small columns marching swiftly," might be accepted as a means if suited to the ground, *provided they deploy before entering upon the arena of the attack proper.*

Across ground the nature of which renders an advance in line impracticable, and except where it is so exposed to fire that the extension and successive dashes of the whole* (as with skirmishers and supports, p. 23) is advisable, the flank march of fours, from the wider freedom which it offers to the exercise of judgment among subordinates, whether

* To traverse open ground under hot aimed fire, and to form line under cover or lying down near the enemy's position, a Regiment or Brigade *in line* might move by successive dashes (50 yards at a time) of sections, or one rank of sections, extended over the front of their own companies, commencing with right or left sections. One guide and marker per company would accompany the leading sections, keeping their company distance from the flank of direction. The enemy being of course occupied to some extent with the skirmishers, there would be no difficulty in forming a thoroughly efficient line without exposing the points or standing up to dress.

for divergence, variety of pace, or temporary loosening of files, seems likely to combine the greatest facilities for getting over the ground, taking advantage of all cover, and maintaining an amount of order, from which the order of the whole can most readily be resumed. It might almost be denominated the independent march of companies, but not quite so—order must be the rule, independence the exception.

Advance of the Second Line.—The circumstances under which the advance of the first line across the space to the borders of the attack proper is made, differs somewhat from those of the second. The first line follows the skirmishers while they are still in motion. During their progress the enemy are comparatively slightly engaged (though the artillery must endeavour to make up for it), and they might even share with the skirmishers a small portion of the aimed fire; the unaimed shot sphere is continually varying with the mark; and the firing generally is more scattered. When the skirmishers and the first line have reached their position, the enemy will be more hotly engaged, the direction of their fire will be more steady, and the shot spheres pretty constant. The second line (except for the enemy's artillery), when the time arrives, may advance in almost any formation that the ground will admit, avoiding the unaimed shot spheres. If the ground admits, the four-deep line will often be the best for present and future purposes.

From this it will be seen that if the attack is opened by bodies separated from each other by 400 or 500 yards, special facilities will often be afforded for bringing up the second line with little risk. These dispositions may then be converted into converging attacks by inclining towards the centre, or a flank, during the attack proper.

THE ATTACK PROPER.

Old Methods of carrying a position.—Frederick the Great

used to wish his troops to carry positions at the shoulder, but, even during the days of flint locks, fire asserted its superiority, when properly used. British troops generally deployed and fired a volley or two before charging, or the attacks were covered by skirmishers, who, however, usually retired behind the line when within musquet shot of the enemy's closed bodies, apparently because there being so little difference between the range of their weapons and charging distance, it was thought well to clear the front to allow the closed bodies to settle the matter between them. The importance of an uninterrupted advance was manifest, but even at those short distances the want of the protection of fire, just before charging, was often felt by the assailants if the defenders remained cool, and the front ranks therefore sometimes of their own accord maintained an independent fire during an advance.

Modern Requirements.—Now, owing to the increased range, the assailants are unavoidably a longer time under fire. Point blank range is extended to 300 yards, and within that distance, before charging distance is reached, there is time now for some ten or a dozen volleys to be poured into them by the defenders, who may be lying down. Modern requirements are therefore that the attack proper must be covered *until the last moment* by skirmishers; and, more than ever, that the steady unflinching advance which infuses such moral force into the skirmishers, and which carries in it such power, moral and physical, shall be retained *in essence* by those in support, with such *systematic modifications*, however, as will afford them as much security (short of lying close or keeping out of the fight*) as could be obtained by individual independence in the unreliable swarm.

Proposed Method of Advance.—It is necessary to adopt some

* Vide p. iv. Introduction.

method of advancing that will embrace the various means that have been pointed out for neutralizing the advantages of the defence. The requirements are, that the advance should be maintained; that the fire of the skirmishers should be *continuous*; that it should be delivered lying down or presenting the smallest possible mark to the enemy; that the movements of *all bodies* should be made at the double, and the smallest possible mark again offered.

Advancing in a general line is therefore only suitable for skirmishers when they are required to fire very little, or when opposed to inferior troops. To maintain a continuous fire, as in the attack proper, the advance across open ground must be by alternate bodies.

The advance by alternate *files* was theoretically good, but impracticable. It left the soldier too much to think about; officers cannot tell at a glance what files are in error, and it speedily becomes a general line. Alternate sections are better; but clearly the fewer fractions there are the more simple the movement, though their dimensions must be limited to an extent which will enable men on the outer flank to conform readily to the movements of the directing flank. Moreover, it is necessary that one body advancing should be adequately protected by the fire of the stationary body. To meet these requirements,—simplicity and efficiency—*i.e.*, that the fractions should neither be so numerous as to be complicated nor of so large dimensions as to be inefficient, the skirmishers covering the front of a battalion in line, or of any smaller body, should, as a rule, be divided into right and left skirmishers. Exceptional circumstances might require further division, but no circumstances could require the alternate advance of skirmishers of battalions.

To enable the closed bodies to move at the double, it

would only be practicable to cover short distances at a time, and the advance by alternate wings of battalions would be preferable to a general advance by short dashes; as by the latter method there would be nothing to mark the time to ensure that *steady, even, unchecked* progression which is a necessity; while by the former, the moment for each wing to rise and double forward is distinctly marked by the other lying down, and the progress is thus as even as the action in walking of placing down one foot to advance the other.

EXECUTION OF A SIMPLE ATTACK.

It is very desirable that an attack should be carried out, if possible, with one vigorous forward effort. The assailant suffers less and the effect is more complete. But this can generally only be ensured by going carefully and deliberately through all preliminaries; the reconnaissance, the choice of point of attack, the preliminary cannonading, disguising the real point of attack, the correct estimate of the force required for the attack, and the provision of adequate supports and a reserve. In proportion as these matters are settled, so will be the completeness of the plan and so will be the *vigour* of the attack, upon which be it observed success now more than ever depends. "Clear plans—no fight should be begun without a knowledge of its object . . . the fight that fluctuates is the most bloody one." (Memoir by Major Tellenbach, p. 22-3.) This deliberation, however, must not cause hesitation or unnecessary delay, particularly when defenders are busy with shelter trenches, &c.

"When obliged to attack an intrenched enemy it should be done instantly, without allowing him time to finish his works. What would be of advantage to-day may not be so to-morrow." (Frederick the Great's Instructions, p. 101.)

The following is proposed as a method for carrying out a simple attack :—

(Battalions to be of 10 companies*—of say 75 R & F—including two flank companies composed of men picked for good shooting and activity. Distance for these two companies not to be allowed in line, their places when not covering the advance being in rear of the two outer companies.)

The Brigade or Division intended to make the attack is formed in one line, out of shot, and if possible out of sight of the enemy, at a distance say of 2,500 yards from his position. If it can be formed nearer, so much the better.

Troops intended for the attack should be relieved of all anxiety about their flanks, for the due protection of which separate arrangements should be made by the General Commanding.

- I. *a.* Those battalions intended for the first line to be deployed with intervals of 12 paces (not allowing for the flank companies.)

Those battalions told off as second line to be four deep, with deploying interval.†

- b.* The line advances as near as it can with safety to the position of the enemy (which is of course being cannonaded),—say 1,200 to 1,000 yards, and lies down.

- II. *a.* The battalions of the first line now cover their front by throwing forward a half company of each of their flank companies. These advance, making the best of their way towards the enemy's position.

* See Introduction, p. vii.

† Battalions or Brigades intended for the second line should generally be on the flanks, and those of the first line in the centre.

- b. When the skirmishers have advanced 150 paces, the remaining two half flank companies and the outer companies advance in support in single rank. One man to four paces, inches.

When, if at all, the skirmishers during this phase should be reinforced with the remaining half companies, must depend on the judgment of the senior officer of the four companies now on the move.

This preliminary to the attack should be executed with dash, and if the enemies' skirmishers are out, there is all the more reason to get on rapidly to short ranges without wasting time.

- c. When the supports have advanced 150 paces, the battalions of the 1st line advance in the formation most suitable to the ground.

- III a. The skirmishers having taken up a position as near as possible to the enemy, say 350 yards, lie down and open a well sustained fire against him, reinforced now, if not before, by the odd half-companies. One man to two paces, inches.

- b. The supports lie down at their proper distance, or as near as 50 yards if possible.

- c. The battalions lie down.

- IV. When, by the fire of artillery and of the skirmishers,* the enemy's fire is deadened, and the moment for the attack seems to have arrived, the impetus is thus given from the rear.

- a. The 2nd line receives the order to advance.

- b. When it comes to within 150 paces of the battalions of the first line, these advance by alternate wings, dashing forward 50 paces (in the *attitude* prescribed for skirmishers) and lying down.

* The skirmishers would do well not to fire direct to their front, but obliquely towards the centre of the attack, leaving the enemy in their front to be taken care of either by artillery or by skirmishers thrown forward by the flank supports.

- c. When the battalions of the 1st line arrive within 100 paces of the supports (now consisting of 2 companies per battalion, one on each flank), these advance alternately in like manner, throwing forward a half-company each to reinforce the skirmishers (not simultaneously, but by wings as they approach).

ne man to
0 inches.

(The skirmishers now consist of three companies per battalion, and there are two half-companies in support).

- d. The moment they are reinforced, and as the right wing of each battalion lies down, its right skirmishers spring forward 25 paces, and cover the forward rush of the left skirmishers which is made as the left wing of the battalion lies down. The movement is then continued in alternate dashes of 50 paces, the battalion and its skirmishers coinciding as nearly as possible.

- e. When the battalions of the 2nd line reach the position lately occupied by the 1st line, their advance is conducted in the same manner, *i.e.*, by alternate wings doubling 50 paces and lying down.

ne man to
0 inches.

If the enemy remains firm, lying close and firing steadily, the skirmishers will probably flag in about 150 paces (*i.e.*, 200 yards from the enemy). They should be at once *reinforced* by the two half-companies in support, which may carry them on another 50 yards. They will then probably shorten their dashes, allowing the battalions rather to gain on them, and they may be urged on another 50 yards, when it would seem that the enemy must rise, or at any rate he will probably be visible. Should he, however, having good cover, still lie close and maintain his fire, the skirmishers must be immediately

reinforced with a company from each flank of the battalion, and more ground gained.

Should he rise and fire kneeling, or standing from a well ordered line, the battalion must close on the skirmishers, open quick fire for a short time *still working forward*, and charge *the moment the enemy's fire slackens*. But the fire of battalions must on *no account be resorted to unless the enemy is firm and distinct, and the distance charging distance, or almost*.

Should the enemy give way, the skirmishers must be at once relieved, and he must be pressed as closely as possible, and *hurried* over any supports he may have prepared in rear, which will be the best means of disarranging them.

Business of the 2nd Line.—When fire was less powerful it was important, as the assailant's 1st line approached charging point, that the 2nd line should be close at hand either to follow up with its fresh, unshaken, *muscular force*, the vibration of the shock of the front lines, or to sustain muscularly the shock of a counter attack. There was a crisis which rapidly passed away.

Now "fire power" is so increased that the employment of it must not be relinquished and the charge resorted to, until not only is the distance very practicable but the enemy's fire very weak. The same applies to the defenders and the chances of success of a *direct* counter attack. If they were to attempt a charge even at 100 yards while the enemy's fire was strong, they would throw away much of the advantages of the defence, and would probably be mowed down.

The second line is therefore required :—

1. By its moral force to enable the first line to continue to gain ground.

2. To be at hand to take up the fire (relieving the first line) if it should appear to be slackening.

Advancing by alternate wings the second line will maintain its distance of 150 yards while the work of the skirmishers and first line is easy ; but the dashes of these will shorten as the work becomes hotter, and the second line will then gradually gain on them. This will give ample time for the "fire fight," and it will be time enough if the second line is at hand when the first line is within 50 yards of the position. Victory-cannot in these days be snatched in a moment by a direct charge of the defenders. The battalions of the first line, with their pouches full, will be able to take good care of themselves for some minutes, and the crisis can always be staved off by holding on the defensive the ground that has been won.

The foregoing plan is based upon our own old and tried principles, with such modifications as the increased power of fire and the recent experience of our neighbours seem to demand.

The special points in the formation are :—

1. The skirmishers and supports are furnished from the battalions in rear of them, so that they may be reinforced until the whole of what was the first line is expended without mixing corps.
2. The intensity of fire is maintained (exclusive of reinforcements) during the attack, notwithstanding casualties, by causing the skirmishers to close in a given direction ; the battalions doing the same by the diagonal march. The extent of front would be maintained by moving up troops from those supporting the flanks of the attack.
3. In the advance to the attack proper, not only is the mark for the enemy constantly changing its distance, but his attention is attracted (if at all)

right and left by the alternate advances. The movements of the battalion suit this. When the enemy's attention would naturally be drawn in a greater degree towards the advanced position and fire on the left, the right half battalion makes its rush to the front, and when much of his attention would probably be diverted to the right, the left half battalion dashes forward.

Positions of the Officers.—A captain cannot, in a serious affair, command his company from the position assigned to him in the present drill-book. In these movements the position of officers commanding companies must be the old one, viz., on the inner flank of the front rank. In action men can readily execute simple movements to which they have been drilled, and only want the signal; but, with an enemy in front, they ought not to be required to turn their ears back, still less to look behind them to discover amid the din if their captain wants anything done. From the captain's old place they can be commanded well. A glance of the eye to a flank catches his gesture and the thing is done. The "guides" are no substitute; they will be cheerfully obeyed when they fall into the command, but in danger the soldier likes to see *his captain*. It may be said that the commanding officer is in the rear—that is theory, he is not always there, but if he were it would be an additional reason why the captain should not be there also. The latter can catch the commanding officer's word or gesture by a half turn, but it would never do for all the men to be turning to catch the word and gesture of their captain. What there is to be done in rear can be better supervised by two subalterns, who have nothing else to do, than by the captain who has the burden of the command besides.*

* A graver reason against the present system, from a subaltern's point of view is, that their senior's chances are improved and their own diminished, which is not fair.

It may be urged that the foregoing is an impossible fight. That may be true, but most British officers will admit that *if an enemy could be found* to hold out as the defenders have been supposed to do, there would be no difficulty in getting British soldiers to carry out the part that has been assigned to the assailants. And, *vice versa*, if such assailants could be found it would be nothing new for British soldiers to stick stolidly to their posts. But it would be absurd, when striving to point out the perfection of duty, to cut short an imaginary battle at any point with the remark "at this period the enemy will decamp." Napoleon I. made such a miscalculation in his last battle.

CONVERGING ATTACK.

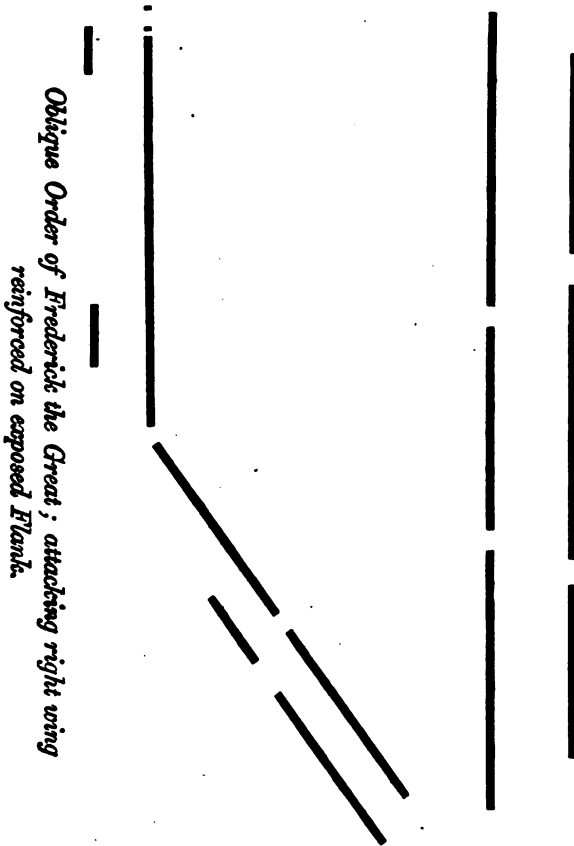
The converging attacks practised by the Prussians are most deserving of attention. The principle is sound; a superior fire converges from the arc upon a part of the enemy's position which forms the chord. The different attacks incline or converge towards a named one, so that the greatest number of men that the space will allow reach the enemy at the critical moment. Briefly it might be arranged thus:—

- I. The whole of the attack is deployed on one line, forming a base double the extent of the portion of the enemy's position to be attacked. For convenience sake say five brigades, which are told off alternately from the right, for first and second line.
- II. *a.* The flank brigades (1 and 5) of the first line advance in the manner prescribed for the simple attack, their skirmishers taking up a position as near to the enemy as possible, say within 300 yards, strongly reinforced, and directing their fire diagonally inwards against the enemy.

- b. The centre brigade (3) advances at the same time and in the same manner until its skirmishers are about on a level with the battalions of the outer brigades, *i.e.*, about 500 or 600 yards from the enemy.
- III. Artillery can be massed either on the place vacated by the outer brigades, and a battery or two, if practicable, may be further in advance, in the intervals between the brigades.
- IV. Infantry, Artillery, and if the ground permit, Cavalry are in echelon in rear of the outer flanks of the attack; to support and feed the attack and guard against a counter attack.
- V. a. The two brigades of the second line now advance, and the same thing follows as in the simple attack; the battalions of the third brigade moving off when the second line is within 200 paces of them.
- b. When the centre skirmishers spring forward, the battalions of the flank brigades (who were on a level with them) advance, inclining inwards.
- c. The supports and skirmishers of the outer brigades follow suit at the proper moment, inclining inwards.

OBLIQUE ORDER OF FREDERICK THE GREAT.—No one knew better than Frederick the Great the meaning and value of turning a flank, and yet he makes distinct mention of what he calls his "oblique order." Many of his readers, including perhaps Napoleon I., have evidently understood his mention of the oblique order as something distinct. It seems not improbable that it may have been the parent of the converging attack. There was, of course, some risk in it, but a great deal of reality. It will

be seen by the diagram that in former days the overthrow of the assailants would depend on *active* measures being taken by the defender against the exposed flank. But,



first, few armies have adopted the defensive with the Duke of Wellington's quiet determination of giving the enemy all the labour and risk and then knocking him over: the defensive with foreigners being generally a sign of diffidence. And second, Frederick rather liked an

enemy to come out of his position, for he was generally prepared to return the charge vigorously and enter with him.

The exposed flank was therefore probably very well supported. In these days the fire of the assailant would converge from a long distance, his exposed flank would be covered against fire, a direct counter attack against him would be questionable, and he must provide against a flank attack by echellons in support and the fire of Artillery.

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FRASER'S MAGAZINE

NOVEMBER 1872.

THE AUTUMN MANŒUVRES.

BY THE REV. G. R. GLEIG, CHAPLAIN-GENERAL.

NOBODY who has any knowledge at all of military matters will deny that Autumn Manœuvres conducted on a sound principle must, from the very nature of the incidents to which they give rise, prove useful rather than otherwise to the officers and men who take part in them. If they teach no other lesson, they are at least capable of being made to show how masses of men, guns and horses, are to be moved; how roads and pathways running parallel with one another can be utilised in bringing columns rapidly into line of battle; how necessary it is to success in every military undertaking that there shall be perfect accuracy of calculation beforehand, and the most exact attention to time, both in quitting one position and arriving at another. Then, again, it is only when you get some fifteen or twenty thousand men together, that you are able practically to make manifest how the fronts and flanks of armies are to be guarded by outposts judiciously planted, having their supports sufficiently near to sustain them in the event of an attack, yet not near enough to be involved in the first rush of the assailants. The habit, also, of getting day by day under arms without beat of drum or sound of bugle, though simple enough in itself, is never acquired till men take the field, either in play or in earnest;

and the consequence is, that troops unused to other than barrack life, almost always at the beginning of a campaign make the enemy aware, when they come into their presence, by the booming of morning guns, or the noise of *réveille*, of the exact hour before which they may be caught napping. So likewise with respect to the transport of *matériel*, and the due supply of provisions to men and forage to animals, always on the move;—these most essential elements of success in war cannot be mastered at all, either in garrison towns or in standing camps. It is true that, in respect to matters of this sort, such instruction as peaceful manœuvres convey must, under the most favourable circumstances, be imperfect. In this country especially, where every man's house is his castle, where his horses, sheep and oxen are sacred, and his very corpses flourish under the guardianship of the law, the departments of transport and supply must from first to last operate upon illusory principles. Whatever may be the case in Germany, we cannot in England impress a farmer's team, nor cut down a gentleman's timber to feed our bivouac fires. And so far, it must be confessed that our Control Department has grave difficulties to contend against, of which not the least unfortunate result is, that we spend vast sums of money only to learn in peace what

must, to a great extent, be unlearned in war. Still, in spite of this drawback, a good deal is gained, even by the Control, if it be only in the skill to which men attain in packing and unpacking animals and waggons, and the knowledge at which they arrive where to place the team on the line of march, and how to dispose of it when the march is done.

On the whole, then, it must be conceded that annual gatherings of *corps d'armée* for the purpose of manœuvres which shall carry them through a fortnight at least in point of time, and over a considerable extent of country, come next to real war in teaching both officers and men the purposes for which they have been drilled and are embodied. But, then, the manœuvres to effect this end must be conducted on a wise principle; in other words, must be in themselves so simple, that all concerned shall understand the object of them, and at the same time be limited strictly in space to the front which the force actually engaged in them can cover. The moment you forget these two requisites you defeat your own purpose. If generals be hampered with imaginary corps operating on their flanks or in their rear, there is an end for them of everything like consistency of action; and the order to cover, say with 20,000 men, a front which would be imperfectly guarded by 50,000, trains them, not to avoid errors, but to commit them.

The principles here laid down are applicable to all armies of manœuvre in all parts of the world. There are others, which if we intend our own manœuvres to leave good fruit behind them, we must take care to apply specially to ourselves. In the first place, never let the plan laid down beforehand be based on a supposition that an enemy has *made good* his landing in force *upon our shores*; has established

a base of operations there, and is marching upon London, which we may still hinder him from reaching. The objections to this theory are so obvious and manifold, that we hardly know how to enter upon them.

A great deal of nonsense has indeed been written and spoken about our liability to invasion. Because the Duke of Wellington five-and-twenty or thirty years ago wrote a letter to Sir John Burgoyne, in which he deplored the defenceless condition of the country, and blamed the Government for leaving it in that state, we have had ever since a succession of alarmists, whom nothing will satisfy, except the admission on our part that we may at any moment find ourselves on English soil face to face with a hundred thousand disciplined foreign troops, and that our only hope of safety lies in being able to meet them in fair fight with a force equal or superior to their own. Now we hold that to land a hundred thousand men, properly equipped with guns, horses, waggons, and means of transport, on any given section of the British coast, from the mouth of the Thames to the extreme point at Caithness, and back round that point to the mouth of the Thames again, is an exploit beyond the reach, we do not say of any single European power, but of all the powers of Continental Europe put together. Consider the amount of tonnage that would be required to transport such a force across the Channel. Look round and see whether there be anywhere, within reasonable distance of the English coast, any single harbour large enough to contain one half the number of vessels that would be needed for such a service. Think also of the enormous extent of sea room which such a fleet as you are dreaming of would require, in order to avoid, not only confusion but risks of collision, as well while in motion as when riding

at anchor. And do not fail to take into consideration the fact that England is the greatest naval power in the world.

No doubt the enemy who has made up his mind thus to invade us, and to dictate his own terms of peace in London, will use every effort either to destroy our naval supremacy in the first instance by engaging and overpowering our fleet in a great battle, or being unable to accomplish that end, he will do his best to lure the bulk of it to a distance and make his dash at a time when he has reason to believe that the Channel is comparatively unguarded. But does it follow of necessity that he must succeed in either object? May we not rather conclude that, inasmuch as grave combinations of many powers against one are not effected in a day, (and that any one power would venture in this shape to try conclusions with us is for the present out of the question), it is at least probable that our Government will hear something of this European conspiracy before it comes to a head; and that once fairly warned it will spare neither labour nor expense in making preparations to meet the danger? And time being given for calling into play the resources of this rich and populous country, does anybody suppose that we shall not be able to put to sea four ships for every three that the enemy may bring forward? Assuming that our fleet is at this moment superior to those of any two or three of the other naval powers, it seems to us that to live in the apprehension of a crushing disaster at sea is ridiculous. To be sure, our fleet may prove, when put to the test, worthless. There are those among us who believe, or profess to believe, that no great reliance is to be placed upon it. The wood-work, they say, is rotten; and how far the armour will serve its intended purpose in the day of battle

remains to be seen. But these are assumptions on which we are not called upon to rest any conclusions, for this much is certain,—if our armoured ships of war be a mistake, the armoured ships of other nations are a mistake likewise. We are not, therefore, so far as that matter goes, in a worse plight than our neighbours; while if it came to a struggle between craft of all sorts hastily fitted out and sent to sea, we rather think that from London, Liverpool, Bristol, and the mouths of the Humber and the Tyne alone, there would be poured forth a swarm of gunboats more than competent to sweep the Channel from end to end, and scour the coasts elsewhere.

Therefore, before we can admit the possibility of such an invasion as was imagined, and became the rationale of the recent manœuvres on Salisbury Plain, we must accept it as a settled thing that our naval arm is broken. When that fact is made clear, the sooner we cease to think of defending London with such a military force as is now at our disposal, the better. We may doubtless become a great military nation, some day, if we please. The number of young men fit to carry arms is large beyond all our requirements; they are, man for man, physically equal to any in the world, and could, in time, be made first-rate soldiers. But if we are to depend upon our land forces for the defence of our capital, and the maintenance of our proper place among the nations, we must subject them to a military training very different indeed to that which we now bestow, except upon our small but admirable regular army.

Are we contending, then, that the invasion of England is impossible? Far from it; England has been invaded before, and may be invaded again. No doubt it is a long look back to the Norman conquest, and a considerable one to

the arrival of Dutch William in Torbay. Still they are both historical realities: and Napoleon the First in his St. Helena romance assures us that had Admiral Villeneuve obeyed the orders given to him, we should have had the game repeated in this current century, with results not less decisive than were accomplished before. But the world has not stood still even since 1805, and an operation which might have been attempted then with some hope of success, no sane man would think of hazarding now. Conceive a multitude of flat-bottomed open boats, even if taken in tow by steamers, trying to make their way in long lines from Brest or Boulogne to the English shore, filled with men, horses, guns, waggons, and all the munitions of war. Why, if every English ship of war in commission were away for the protection of Malta and Gibraltar (an incident we imagine very little likely to occur) there would be found in our mercantile marine hundreds of steam-ships, the crews of which would not hesitate to sacrifice themselves if need were, and their vessels also, in order to run down the enemy's flotilla and frustrate his design. We repeat then, that an invasion on the scale meditated by Napoleon, and arranged upon the plan which he describes himself as having drawn, is in these days out of the question. But it is not out of the question, very much the reverse, that England, and still more that Ireland may be invaded. Indeed, we will go further: it is extremely probable if we ever find ourselves at loggerheads, say with France or Russia, or both—these powers, or either of them being in alliance with the United States—that expeditions will be fitted out in order to make Englishmen feel what war really is, by throwing bodies of troops upon our shores for purposes rather of havoc than of conquest. But such expeditions will

certainly not comprise a hundred thousand men apiece, or half that number. Ten thousand, perhaps twenty—possibly, if Ireland be the point assailed, thirty thousand men—may be risked in one or other of these enterprises. Be it so, what then? To land thirty thousand, or twenty, or even ten thousand, men, their guns, horses, and stores, on an enemy's coast, is not the work of an hour. To provide them, in an enemy's country, with food and means of transport would occupy days, even supposing—which we would not willingly do—that they found among the peasantry a ready welcome. And what would the invaded be about all this while? and, therefore, what is the principle on which, if we must contemplate the issue, our own Autumn Manœuvres ought entirely to be arranged? Clearly the same as that on which it would become us to act if the sham were a reality. We have magnetic telegraphs everywhere. Our lines of railway connect all our military stations with one another, and touch every bay and harbour of which an invader, coming in any force, would be obliged to make use. While war-ships are hurrying towards the scene of action, and rendering the establishment of a base by the enemy impossible, our troops must be brought down, with all the speed of steam, to a convenient point of concentration. Not a moment should be lost in attacking the invader. If you can catch him in the act of landing, go at him with horse and foot while your artillery smashes his boats. If you arrive too late for this, and he be in position, not the less fiercely and rapidly deliver your attack. You must have been very negligent, or your telegraphs have served you ill, if you fail to come into presence before his guns or the bulk of them be on shore. Woe to him if the case be so. Your artillery alone will overwhelm him.

In such a case there is very little need or scope for manœuvring. However commanding his position may be, he will find himself unable to maintain it in the face of such a pounding as you will give him; and the moment he wavers, go in and win—as win you surely will—even if in point of numbers he be equal or perhaps superior to you.

It appears, then, to us that if the plan laid down beforehand should involve the idea of an invasion at all, it ought to deal with the calamity in a business-like manner. Do not shirk the discredit of possible failure. Do not be afraid of teaching foreigners anything of which they are now ignorant. You desire to show your own troops how to repel an invader. For heaven's sake, let your lesson be a practical one. Embark one army in ships; keep the other distributed, as it usually is, but warned to be in readiness to move at a moment's notice. Settle where the fleet is to steer to, not, however, giving any information to the general who is to command the defending force, and caution your postmasters, all along the coast, to be prompt in flashing to the War Office in London the earliest possible tidings of the fleet's arrival. Then see with what celerity the defending general can get his army under weigh; whether your organisation is perfect enough to meet a sudden emergency; in how short a space of time the force concentrated, say at Aldershot, can be transported with its armaments and equipments complete, to Pevensey, or Shoreham, or Torbay, or whatever other point you may have fixed upon as that at which the disembarkation is to take place. If the invader succeed, before the defenders attack him, in landing ten thousand men with their guns, horses, and stores, or in throwing up works sufficient to cover his front, even then the honours of victory must not necessarily be awarded

to him. He has yet to collect his means of transport and make his first onward move. But if he shall have made one march into the interior, carrying his stores with him, and leaving defensible works in his rear, the defender has arrived too late: he is the beaten general. On the other hand, should the defender succeed in taking his antagonist *in flagrante delicto*, whether while yet struggling to reach the shore or occupying a position with infantry alone, then the palm should be given to him. He has repelled an invasion.

It is possible enough that the pecuniary outlay necessary to carry such a programme into effect may be more than the occasion will warrant. In this case we by no means recommend its adoption. But we do venture, with all possible respect for the superior judgment of others, to advise that never again shall our Autumn Manœuvres be based upon an assumption which is preposterous: which implies either an impossibility, and is therefore a delusion and a snare; or which, if accepted as possible, puts us out of court, so far as regards the means whereby we pretend to avert from England, no longer mistress of the seas, the greatest of all imaginable national calamities.

But if we are not to imagine that an enemy is upon us, and that we are called upon to encounter and destroy him before he can reach London, what other theory would you suggest? In real warfare every campaign is undertaken for an object. What object would you propose to one of your leaders, what to the other? and how are you to decide between them? The answer is obvious.

Assume that war is going on pretty much as our fathers waged it in Spain and Portugal, or as the Prussians did in France two years ago. Select some town, or place which shall represent a town, and

consider it in a state of siege. Tell one of your corps commanders that he is to cover the siege; another that he is to do his best to raise it; and leave them both, after that, to settle their own plans and to carry them into execution in their own way. If the relieving general succeed in penetrating within certain limits, the siege is to be regarded as raised. If the covering force either meet him at every turn, or compel him to deliver a battle at manifest disadvantage, then the attempt to raise the siege has failed. You may, after this, if time will allow, follow up the defeated army, whether it be the covering or the relieving army, till either it shall have been cut off from its own base of operations, or has succeeded in making good its retreat into a place of safety. But let everything be done exactly as it would be were two armies of a certain fixed strength opposed one to the other. Establish, therefore, for each a base equidistant, or nearly so, from the beleaguered city. Let these bases be at least six or eight days' march apart, and appoint the day, if you please the very hour, when the campaign is to open, and there stop. Let no more hints emanate from head-quarters. Let there be no shadowy hosts hovering about either force. The single imaginary body or host admissible must be the supposed garrison within the supposed beleaguered fortress, and all the real work must be done by the two *corps d'armée*, whether they number ten, fifteen, or twenty thousand men respectively.

But it is not alone in regard to the plan of campaign, and the measure of independence allowed to the leaders on both sides, that there is ample scope for improvement in the management of our autumnal campaigns. We waste a most unnecessary quantity of powder in these operations. No soldiers, and least of all English soldiers, require to be

taught how to stand up and blaze in the faces of their enemy. It may be questioned, indeed, whether our people, as well officers as men, would not learn more if they took the field, on such occasions, with empty pouches. For raw troops—and as yet the bulk of our troops must be considered as raw—invariably become excited when firing begins; and if there be no casualties in the ranks to cool their ardour, they are apt to get beyond the control of their officers. Besides, as we have just mentioned, it is not the object of Autumn Manœuvres to teach the men how to deliver volleys, but rather to teach officers how to get the men into positions which, in their bearing upon the enemy, will enable them to pour in their fire with the best effect. And this may be done, less picturesquely doubtless, but quite as effectually, when there is no firing at all, as when there is positively more than would be heard in actual warfare.

Again, we would venture to suggest that umpires be a little more slow to decide that, because portions of either army are exposed to what would be a heavy fire of artillery, they are therefore out of their proper place, and must shift their ground. Unless the umpire quite understand the whole of the general's plan, he is scarcely a competent judge of particular movements, or of the dispositions which result from them. The Duke's squares at Waterloo were exposed to a tremendous cannonade. Had he moved them, so as to be covered from that fire, the whole of his Belgian supports would have taken to their heels, and the battle might have been lost. In the operations round Metz, two German brigades, on August 15, attacked the rear of Bazaine's army; and were immediately engaged with four times their own numbers. Had they withdrawn when thus opposed, Bazaine would have re-

sumed his march, and succeeded in uniting himself with the force then assembling at Châlons. Besides, it is a lesson of very doubtful utility to teach, that because they are somewhat exposed or outnumbered, battalions and brigades are to consider themselves beaten. The British army would have scarcely achieved the renown which attaches to it, had dogmata like these been accepted by it as irrefragable. We should be sorry to see them established now.

Another mistake which our enterprising officers commit, is that they harass their troops a great deal too much. We hear of infantry marching in these late manœuvres at the rate of four miles an hour; not for a spurt in order to seize a position, but throughout an entire day. Such marching would knock up the most seasoned troops in the world, if persevered in for any length of time. It ought to be discountenanced, indeed forbidden. So, likewise, night marches, with masses of cavalry, over ground not thoroughly reconnoitred, especially if they have no tendency to bring about a successful issue in some critical operation, should be unheard of. Let there be no stint in scouting. It is one of the main purposes for which cavalry may be said now to exist. But to hurry heavy dragoons beyond the reach of their supplies, only that they may cover a ford which the plan of the campaign requires them afterwards to abandon, is to commit a gross military blunder.

Such, then, is a rough statement of the views which we entertain of these Autumn Manœuvres, of the purposes which they should be made to subserve, and of the more glaring of the errors of judgment exhibited in the management of them. Generally speaking, they have been conducted in a desultory, and therefore dangerous manner. Attempts to outflank each other carried both

armies, the other day, into such an extension of line, as must have presented openings numberless for cutting through, and doubling it up on both sides from the centre. Had Sir Robert Walpole, for example, been on the alert, or been left free, perhaps, to act as the occasion warranted, he would have caused Sir Alfred Horsford to pay dear for the flank march which he made in order to circumvent and destroy him. Had General Michel, when cut off from his proper base, hazarded a fierce onslaught on Walpole's left, he might have turned the tables on his adversary, and played a game of double or quits with him to advantage. All these mistakes, however, arose naturally out of the absence of a rational plan to which the several generals were bound to adhere. Both manœuvred, so to speak, in the air, and therefore without any definite purpose. The defence of such a river as that for which they fought, was a sheer absurdity. It covered nothing, it could not cover anything. It was fordable in scores of places.

Again, if it be necessary in real war to establish magazines whence armies in campaign are to draw their supplies, it is obviously the duty of those who prescribe how Autumn Manœuvres ought to be conducted to make arrangements on both sides for this essential contingency. Having pitted two bodies one against the other, and assigned to each its base, the next thing to be done is to contract with farmers, bakers, and even, if possible, with brewers, living within easy distance of the scene of the coming operations, or across them, for the supply to the troops, at fixed rates, of meat, bread, forage, and perhaps beer, the same to be delivered at certain points and in settled quantities to the officers of the Control Department, on requisition from the generals commanding on either side. There could be little difficulty in

any part of England, certainly none on Salisbury Plain, in managing these details, so that while farmers, bakers, and brewers made a sufficiently good thing of them, officers should be taught to recognise the value in a campaign of a good system of requisitions, and the necessity of at once providing their men on the march, and guarding their own supplies. The arrangement would, moreover, be on the whole economical, because though a commissariat train must follow each army, it need not be so large where the inhabitants are supposed to be requisitioned as when the troops depend entirely for their daily subsistence on what is carried in commissariat waggons. And another, and scarcely less important, result will be gained. As the war was actually carried on, last month, the commissariat of one host lived on the most friendly terms with that of the other. They passed to and fro from either camp. They lent each other their horses, their waggons, their drivers; they ran no risk whatever of falling into the hands of the enemy, because they were all just as much at home in the camp of the invader as in that of the defender.

Another palpable error into which we fall in these cases is that we simulate war with such battalions, squadrons, and batteries, as we should never think of putting in the field if the war were a reality. Professing to take the Prussians as our teachers, we violate the first and not the least important of the rules which they have laid down. Before their corps assemble for purposes of manœuvre, they call in their reserve men, and raise every battalion, squadron, and battery, to its full war strength. Commanding officers thus acquire the habit of handling in peaceful operations the force which they will be required to handle when hostilities break out. We, on the contrary, take the field

with skeletons; and requiring these skeletons to do the work of full battalions, squadrons, and batteries, we teach our officers false lessons. A Prussian battalion on the peace establishment may be as weak as an English battalion. A Prussian battalion called to an autumn manœuvre brings its thousand bayonets with it. Of the English battalions engaged in these recent manœuvres, scarcely one took into the field as many as six hundred bayonets, and not a few fell short of four hundred. How can an officer in command, say of 350 men, do battalion work at all? In these days, when skirmishers, to be of any use must go out in 'clouds,' what is the battalion leader to make of a force which scarcely exceeds in point of numbers a Prussian company? On one occasion at least—there is reason to believe, on more than one—the battalion leader did this. Being put in charge of ground which a thousand men would have held with difficulty, he threw out the whole of his weak battalion into skirmishing order. If he ever find himself face to face with an enemy and try that game again he will rue it to his dying day.

And here we would enter our protest against the notion which threatens to become universal, that because their weapons have of late enormously increased in range and rapidity of fire, the tactics of the English Infantry must be entirely revolutionised. Hitherto the battalion has been our tactical unit; henceforth the company is to supplant it. Hitherto we have fought our main battles in lines of battalions; we are to fight them for the future with enormous masses of skirmishers, constantly reinforced and acting independently of their own officers. And all this we are to do, because the Prussians make the company their tactical unit, and in skirmishing throw the men of different companies, and even of

different battalions, pell-mell into the same heap. Now we venture to protest against the adoption of any such procedure on two grounds. First, it is not the fact that the Prussians fought any of the great battles of the late war entirely in skirmishing order. When they first encountered the French their main line of battle was as compact as our own. It was only after they had learned to despise their enemy, and found themselves opposed to raw levies, that they delivered and accepted battle in loose order. At Weissenburg and Wörth we believe that they attacked with a front of three file to a yard. In the operations against Aurelle des Paladines, round Orleans, and against Faidherbe, near Havre, three men sufficed to cover five yards of ground. It is not, therefore, the fact that Prussian tactics discard those close formations to which we still adhere. They cover their front with many skirmishers, whether the battle be offensive or defensive. But in either case their line is still a compact line, which, when brought into action, decides the fate of the day.

Next, the comparative value of a line formation, as opposed to the imaginary scramble of which we have heard so much of late, has never been tested. The French, in the late war, adhered to the infantry tactics which were in vogue with them in the days of the first Napoleon. They attacked in heavy columns, covered by skirmishers, and were destroyed by the distant fire of the Prussian artillery. But artillery fire, though never to be despised, is comparatively harmless when directed against a line. Each shot that tells may knock down two men; or, if a shell explode just where it ought to do, perhaps four or five will be disabled. But even where lines are stationary, not one cannon shot out of twenty touches them; and if

they be in motion, the proportion of misses to hits is much greater. Nor is it any answer to this statement to say, that artillery is efficient at such enormous distances now, that formations other than loose, whether it be for attack or defence, may no longer be trusted. Nobody, of course, except a madman, would send a line of infantry, unsupported by guns, to attack a position the front of which could be swept for two thousand yards by artillery. But given guns enough to engage those which harass us in a fair duel, and we will continue to attack with battalions formed in line; taking care, indeed, to clear away the enemy's skirmishers, if he have any out, with marksmen as numerous and agile as his own. Behind these, however, the line will move on rapidly; and the losses sustained by it when it halts upon the position which it has carried will be found to be much less severe than had been anticipated. It is astonishing how unsteady the aim of even veteran soldiers becomes when they see coming down upon them in the open a line of resolute men. It is marvellous how volleys delivered by weapons of precision pass over the heads of men who gain but a pace while the projectile is *in transitu*.

And here we would take the liberty of assuring the able writer who has criticised the late manœuvres in the *Times*, that British soldiers must have changed their nature very much if they hesitate when skirmishing and intermixed, company with company and battalion with battalion, to obey the orders of any officer who comes near them, without stopping to enquire whether he belong to their own regiment or to another. We speak from personal experience. We have ourselves, long long ago, covered points of attack in open day, and taken part in night actions, and we never found the smallest difficulty in getting the soldiers of other regiments than our own to

do as we directed them with just as much promptitude as if they had worn the same uniform as ourselves. It is of the very nature of a sharp skirmish that it gets both men and officers into confused heaps. The men are badly trained indeed, and more wanting in intelligence than any English soldiers whom we, at least, have encountered if they will not take ground on such occasions, to the right or to the left, or halt, or advance, or retire, at the bidding of any officer who gives the word or causes the signal to be blown.

We deprecate, therefore, any attempt to substitute for technical arrangements which have hitherto served us well, and to which we are accustomed, new devices which, however suitable they may be to others, may not suit us. The Prussians, for instance, find that, with four officers to a company, they can distribute their battalions into four companies only, without any damage to discipline. Be it so. But do not forget that the rank and file of a Prussian battalion are drawn from all classes of society; that the gentleman, the trader, and the peasant stand shoulder to shoulder on parade; and that the influence of the higher and more intelligent classes in maintaining order among the lower is immense. Remember also that the non-commissioned officers in Prussian regiments are much more numerous than in our own; and that they all receive a special training. Give us a conscription, without power to the drawn man of providing a substitute, and our battalions will be quite as amenable as those of Prussia to moral influences. But that is not all: the Prussian captain of infantry is a mounted officer. He is vested with greater authority over the men of his company than we give to the colonel over the men of his battalion. He pays them himself; he is responsible to the colonel that their *messing* is good, their clothing com-

fortable, and their arms efficient; he punishes the delinquent and rewards the good soldier, without reference to any higher power. And the system answers, because, as we have just said, the Prussian company is but the male population of a particular Prussian town or rural district, with arms in their hands. How are our companies made up? Of the waifs and strays of society, gathered in promiscuously from all parts of the kingdom—an admirable material indeed out of which to manufacture soldiers; but not to be rendered such without bringing to bear upon them a pressure which would be superfluous, perhaps mischievous, if applied to a Prussian company. It is ridiculous to think of applying to an army raised by voluntary enlistment, and therefore filled in its lowest grades exclusively with men who cannot do better for themselves, a system of management and discipline which answers in armies of which the privates may be, and often are, on the same social level with their officers. Not so. As long as we adhere to our present system of enrolment, we must maintain a body of officers very large in proportion to the number of men over whom they are set. And while our battalions continue to be so weak, that there is difficulty for each to get five hundred bayonets on the parade ground, to cut them into four tactical units would be such an absurdity that the bare mention of the design must lead to its rejection.

To the admirable manner in which, upon the whole, the cavalry was worked in the late manœuvres, all who were present during the campaign bear testimony. The night march of the Life Guards was, indeed, a mistake; it harassed both men and horses to no purpose. Yet it showed of what stuff the 'Tin-bellies' were composed, for they were just as much

up to their proper business after that night of hunger and mishaps as before it occurred. At the same time we must confess that both the numerical weakness of regiments, and the attempts continually made to effect with two hundred sabres what five hundred could have hardly achieved, chafed and annoyed us. Nothing could be more beautiful than the constant galloping to and fro of handfuls of horse; nothing more unlike war. We speak, of course, of the movements of the cavalry in the day, while battles were going on: of the manner in which, on both sides, they felt for their opponents, and of the accuracy of the information which their patrols sent in, too much cannot be said in praise. We have heard enough of the intelligence of the Prussian cavalry during the late war. So far as it is possible to judge from what men do in peace, of what they are capable of doing in war, it seems to us, that under the leadership of officers like Shute and Baker, our own cavalry need not shrink from trying conclusions with them, even in this respect. But Shute and Baker had better not attempt to do too much. Cavalry charges, though by no means obsolete, will occur, hereafter, more rarely than they did twenty years ago. It is an old accusation to which our horsemen lie open, that they are too daring. Massena used to say of them that their onset was irresistible, but that they constantly threw away the advantages they had gained by not knowing when to draw bridle.

Of the operations of the artillery in the late manœuvres we had intended to say a great deal, when the admirable paper on that subject which appeared in the *Times* of the 8th of October last fell into our hands. To set down here the criticisms which had occurred to us, would be, in the face of that article, a waste of time and space. Rather

let us transfer from it to our own pages a few sentences which cannot be too carefully read and considered by those whose business it is to make the British Army as effective as possible. After expressing an opinion, in which we entirely concur—that to attach the artillery to divisions of infantry and brigades of cavalry, without keeping an adequate force in hand, which the artillery commander may wield at the fitting moment, as a distinct tactical body, is to waste the power of that arm—the writer in the *Times* goes on to say:

It is evident that this opinion has been arrived at by the highest Prussian authorities; for, whereas formerly the artillery was separated from the rest of the corps organisation in peace, the whole artillery in a district being commanded by a colonel, it is now made an integral part of the corps and commanded by a general, four batteries—half a regiment—being attached to each Infantry Division, and a whole regiment forming the Corps Artillery or Reserve as it would be called with us. Supposing even two batteries to be with the Cavalry Division, there will still remain seven batteries—that is, 42 guns—entirely unattached to any special body of infantry, and quite free to manœuvre independently—in fact, just as independently as a Cavalry Division, except that it is always closely under the command of the Corps Commander. Mark the proportions—24 guns, kept as far as possible together, for each Division; 42 or 48 (according as the Cavalry Division had taken one or two batteries away) for the Corps Artillery. Without interfering with the dispositions of either Division General, the Corps Commander could mass 48 guns on any position he chose. Moreover, without disturbing the intimate relations between the General commanding the whole artillery force and himself, without asking him to leave his staff for an instant, he would have to command those 48 guns—the same man who always commanded them in peace, who has trained them together, and is well known to all the officers commanding batteries, the man who is in fact the colonel of their regiment.

Contrast this organisation with that of our armies at the Autumn Manœuvres. Each army corps had two Infantry Divisions and two Cavalry Brigades. Each Division had two batteries, each Cavalry Brigade one battery—total, six batteries, or 36 guns scattered partly in single batteries,

partly in pairs, but never more than 12 guns together. Reserve, or Corps Artillery as we prefer to call it, one battery for the whole of an army. So the General who has sent his two divisions into action has only under his hand for special purposes, without interfering with divisional commanders, a grand total of six guns. Evidently there was here no preparation for practising the art of handling artillery with definite tactical objects. The present result was, that it was common to find single batteries wandering about promiscuously, or in action doing the best they could, but without being *en rapport* with the head-quarters staff even of Divisions. How could they be when the officer commanding the divisional artillery was supposed to be with the General, who took him galloping over miles of battlefield, sometimes in advance of the infantry skirmishers? If the British system of tactics is to consist in leaving all arrangements without design to the last moment, and then scrambling anyhow into battle, the chief Generals taking command of divisions or brigades out of the hands of their proper chiefs, and pointing out an odd position here and there for a single battery, from which place it must not move, instead of ordering the Commander of the Artillery to execute a definite task, it will require all our national *sang froid* to keep us from reckless confusion and demoralisation. A future historian will hardly write of us that 'the artillery secret had been discovered.'

To sum up all. The Autumn Manœuvres in which our troops have thus far taken part fail of their intended purpose in many respects. They are founded upon a false principle; they are conducted in a desultory manner. They are not instructive in many important particulars either to generals or to troops. They give to both, on the contrary, false ideas of war; and such ideas acted upon would, in the first battle of a real war, get them into scrapes, and occasion the

loss of men highly drilled and not easily replaced. Yet we should be very sorry were they put astop to. It is not, surely, beyond our power to substitute a rational for an irrational plan of operations! We need not always be thinking of London in danger—or huge shadowy armies marching upon it from imaginary bases. Nor are we forced to put in command of the contending forces old Lieutenant-Generals—not one of whom, however excellent his past services may have been, will ever again be called upon to take the field. Give our young men fair play, and try leaders from the several arms one against the other. The part assigned to the Engineers in these campaigns must always of necessity be subordinate. Take an Engineer General, and putting him next year at the head of one of the corps see whether he can hold his own against a linesman. Let the Control learn, also, how to feed and supply an army on the spot—not with provisions and forage and fuel carted about at the tail of columns, but by contracts judiciously made and from depôts wisely placed. But above all, do not attempt to do with fifteen thousand men what would hardly be attempted by fifty thousand; and never forget that the great principles of the art of war are precisely what they were before rifled guns and breech-loading firelocks were invented. The British Army is full of talent. Give it fair play, and Autumn Manœuvres will do for it all that they have indirectly done for the Prussian Army.



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OUR AUTUMN MANŒUVRES.

WE have now finished our second attempt to afford the army some practical instruction in the art of campaigning, and in the higher science of war, by the manœuvring of one force against another. Has it been successful? have we judiciously expended the money voted for it by Parliament? Are the answers to these questions such as to warrant our repeating the experiment next year? A few pages may be profitably allotted to the consideration of these points.

It is not necessary to disprove the commission of numerous blunders on the part of both executive and administrative officers in order that we should be able to pronounce our second attempt a success; for one of the great objects to be attained was to discover our weak points, to find out what was amiss, and where there was friction in the working of our military machine. But if, after having incurred the expense, these faults thus ascertained are not corrected, not only shall we have wasted our money, but our military rulers will have proved themselves culpably negligent of the public interests.

There is no desire on the part of generals or staff officers to hide defects; they are only too anxious to bring them forward with a view to their being corrected. Many in our army dislike changes because they are changes, so that military reformers can only hope to succeed by enlisting the public opinion on their side. The volunteer movement has directed attention so generally to military subjects, that the public is now fully competent to form sound opinions upon army questions that are argued out fully and fairly in the current literature of the day.

The following remarks are written in no captious spirit; the writer has no pet hobby to advocate. His object is to let John Bull know frankly the opinion of a large class of military men as to the shortcomings of our army, when viewed as a machine for the purposes for which all armies exist. It is believed that the following views upon the purely military part of the subject are regarded by some old generals as akin to revolutionary. These views are not, however, very new; and their great claim to consideration is, that they are not original, being shared by the thinking men in every well-instructed foreign army, and by the great bulk of our rising officers. If the following conclusions are concurred in, it is for the reader to appraise the amount of blame—rather let us say of criminality—to be attached to rulers who do not change those tactics that have become obsolete, and to an administrative machinery that has proved so unsuited for the exigencies of war that, when recently tested by the French, it became the primary cause of their disasters.

In attempting to answer the questions with which we have begun this article, it will be well to divide the subject into two heads: 1st, The fitness of our executive system to the requirements of modern war, as well as the manner in which that system has been carried out; 2d, The fitness of our administrative system for the purpose of feeding and of otherwise supplying the wants of our army during war.

The men who have to win our battles may be the bravest and most highly instructed of soldiers; but unless a machinery exists by means of which they shall be kept, when

in the field, well fed, clothed, paid, and supplied with ammunition, &c., the army had better not exist at all, as far as the nation is concerned.

The subject really resolves itself into combatant and non-combatant considerations. It must never be forgotten that the non-combatant class attached to the army exists solely for the service of combatants; it is not *of* the army, but *for* the army. This would seem to be frequently forgotten by right honourable gentlemen in framing administrative regulations, and by those who have to carry them out. The attention of all military organisers should be steadily fixed upon our sabres and bayonets, remembering that victory depends upon their efficiency: their interests must be considered first.

In sending an army into the field, one of the most important functions of a War Minister is the selection of division and brigade commanders to be employed. Judging from the selections made for our operations of both years, a stranger would be led to think that England was not rich in talented generals. Is it considered that the possession of a general's commission carries with it the gifts of ability and fitness for command? With a few brilliant exceptions, it will be generally admitted that the great majority of generals and brigadiers employed this year were not men to whose care the lives of soldiers could be intrusted in war. The troops engaged know this well. Why, therefore, should there be any squeamishness in letting the public know it also? But few possessed any qualifications for command beyond long service and their position in the army list. What a recent writer said of the French generals during the late war, may with truth be said of the large majority of *those employed during both years*

manœuvres: "Par une étrange anomalie, il n'existait aucune corrélation entre le grade et la science, mais seulement entre l'âge et le grade." With us it is not those who are known to be the best men that are selected for commands, but those who possess what is termed "the best claims." The vested interests of officers have still great weight at the Horse Guards; and as long as it is considered that all vacant positions of importance must be given to the seniors, so long shall we suffer as an army and as a nation. Nine times out of ten the most important appointments are bestowed upon men as a reward for long, and perhaps meritorious, service.

Until the country is prepared to come forward and provide for its old generals, by giving them good life-pensions, we cannot hope to see their services dispensed with, nor military commands bestowed upon the best men for them.

It is most desirable that the youngest possible officers should be employed during our manœuvres in all high positions; at all events, the divisions should be organised as regards their generals, brigadiers, and staff, as they would embark in the event of its becoming necessary to send an army to Belgium. Surely no one with any pretence to a knowledge of war, or of the merits and reputation of the officers in our army, would contend that any War Minister would suffer our troops to leave England for real warfare under such generals as have recently been employed, there being, as already stated, some brilliant exceptions. Why, therefore, employ them during the manœuvres? The majority were incapable of affording instruction to others from their ignorance of the science of their profession, and they were beyond the age, and mostly too wedded to old ideas to learn themselves. New military

ideas assimilate as badly with the brains of our generals and older officers as does a patch of new cloth with an old garment.

Those who now hold the rank of general in our army, entered it when the reputation of being a good officer was easily obtained. Few of them have ever studied their profession scientifically; and those who have had war experience have gained it when the tactical requirements of the present day were undreamt of. They have grown old in the practice of what is now an obsolete system, and their scientific attainments are not of an order enabling them to rise to the increasing military requirements of the day, rendered necessary by the application of modern inventions to war purposes. The standard of military efficiency that is now essential for the well-being of an army is not recognised by them; they wrap themselves in the illusory, but to them comforting reflection, that the tactical system that was good enough for Wellington is good enough for them, forgetting the improvements effected in arms since the great Duke's days, and ignoring the altered conditions of fighting they have given rise to.

Before dismissing this subject, let us remind the reader that we are now working slowly and against great opposition towards the establishment of a high standard of military knowledge for all the junior ranks in the army, but we are doing nothing to insure our lieutenant-colonels, colonels, and generals possessing any knowledge of strategy, tactics, or the science of their profession as applicable to those grades. In our junior ranks and in the grades of field officer, we have a large number of highly-instructed soldiers who are devoted to the acquisition of military knowledge. Many of these are on half-pay, and likely to be unemployed until, in

the course of nature, they have become sufficiently old and infirm to reach the grade of general, when, owing to rheumatism and disappointed hopes, they also may perhaps be little fitted for the command of men in war. In the mean time they must be content to rust in idleness, seeing appointment after appointment given away to men ignorant of their profession as a science, but possessed of what is termed by the authorities "good claims for employment."

Our rulers fail to appreciate how essential it is that military knowledge should keep pace *pari passu* with the increased responsibility attached to each step of military rank. Until we insist that all officers commanding regiments, all colonels and generals, shall possess a high scientific knowledge of their business, we shall see displayed at every succeeding autumnal manœuvres that same professional ignorance, and inability to understand the tactical requirements of modern war, that characterised the movements and dispositions made during the last two autumns by the majority of the generals and brigadiers employed.

Running through our whole military hierarchy, there is, on the part of officers, a curious want of confidence in those holding the grade immediately below them. The general commanding a division has no reliance upon the ability of his brigadiers, nor the brigadier upon that of the officers commanding corps, nor they in their turn upon their captains. This is very injurious to efficiency; and the result is, that we find generals amongst the skirmishers, interfering with colonels and captains, to the general confusion of every one. If we would all content ourselves with performing the duties pertaining to our grades and functions, things would

go on much smoother; but when we interfere with juniors in the performance of their ordinary duties or their movements in the field, in the amiable hope that we are helping a dull or stupid officer, we puzzle him all the more. If left to himself, he might not be brilliant certainly, but he would do much better, and have a chance of learning to do still better in the future. This fussiness and desire to interfere is the proverbial failing of our commanding officers; and during any field-day it is no uncommon occurrence to see generals of high rank taking command of regiments, and even of companies, to the great detriment of the service generally. This fault has been most glaring during both years' manœuvres.

Without attempting to introduce competitive examinations into our army, let us trust that, in accordance with the spirit of the age, and in order that our army may keep pace with that of other nations, some system may be devised for insuring to the country and to the soldiers to be commanded, that our superior officers are possessed of the military knowledge now required by those holding high military positions. We hope the day is near when appointments will no longer be given as heretofore, but will be bestowed upon men whose talents and professional attainments warrant their being intrusted with the command of soldiers under fire.

It is hoped that the reader has read the Wellington prize essay of this year. The tactical proficiency now required by an army is fully described, and the important study of how battles will be fought henceforth is well argued out in it. Those views accord with the opinion of the best foreign military writers of the day, and, as far as general principles are concerned, may therefore be accepted unhesitatingly. Many

may differ upon points of detail, but all are agreed in condemning our present formations as unsuited for fighting purposes. The public has of late heard so much about the "Scientific Corps" (the officers of which do not hide their light under a bushel), that we are in danger of forgetting the most important arm of the service—the infantry. So much has recently been written about the importance of artillery, of the crushing effects of the Prussian guns at Sedan, that an impression seems to have taken hold of the non-professional public that to be strong in artillery, without regard to the efficiency of your infantry, means being strong on the day of battle. This alleged increased importance of artillery is a myth. The subject is too large for this article; but let the practical-minded Englishman remember, according to the returns recently published by the Prussians, that out of every hundred wounds, over ninety had been made by the rifled musket. The overwhelming victories won by the Prussians in 1866 and 1870 were not due to any superiority in artillery: it is an admitted fact that King William's guns in Bohemia were badly handled tactically, and played a minor part throughout the whole campaign. Their success has from first to last been attributable to the superior efficiency of their infantry; and no one truth comes out more strongly from the recent experience of war, than that, with equal numbers, the side whose infantry is best will surely win. A French marshal once said that ours "was the finest infantry in the world; but that, thank heaven, there was not much of it." If applied to war under the conditions upon which battles were fought when this was said, the same might with still greater truth be said of it now, for we have gone on perfecting it to

fit it for those conditions. Breech-loading and rifled arms have altered those conditions, but we still go on preparing for a species of war that never can be repeated.

An army cannot stand still as regards its efficiency, and its value as a fighting instrument. To be efficient it must march with the times. There are few mechanical inventions or scientific discoveries having any practical bearing upon social progress that fail to react more or less directly upon the art of war. The great military successes of the world have been gained by men who, as if by inspiration, having availed themselves of the science and inventions of their age to provide their troops with the best arms, were able, through their genius, to perceive the system of tactics most suited to develop their use. Having thus brought their forces into a condition of fitness for war unattained, perhaps unappreciated, by their neighbours, they won victory after victory over these, who, easy-going people—like us at present—had let their armies fall asleep in pleasant but fatal ignorance of their inefficiency.

Our old officers, who still pin their faith to the tactics of Wellington, forget that his victories were due to his thorough appreciation of the requirements of war in the age in which he fought. His line-formation in two deep was the inspiration of a military genius of the highest order; and when his tactics, based thereon, were practised in the field against the column-formation of the previous era, the result was a series of victories that placed our army on the highest pinnacle of military renown. In fact, he won because his tactical conceptions were as far in advance of his contemporaries as they now are behind those practised recently by the Prussians. The Prussians have

been successful from having appreciated that the tactics of Wellington were no longer applicable to war when made with the present arms of precision, and from having adopted a system of attack in loose order to counteract their murderous effects. As Wellington won great victories by being ahead of his rivals in appreciating the tactical requirements of his time, it may with certainty be assumed that were he now living in all the vigour of his youthful mind, he would at once forsake the old theories, and strike out for us a system of tactics in consonance with the military necessities of the day.

Soldiers with a knowledge of their profession, as taught by recent wars, felt sad as they witnessed the engagements near Salisbury, where the slow, rigid formations of an obsolete system of tactics were practised under the approving eyes of so many of our generals. Since then the army has been anxiously expecting to receive official instructions directing attacks in skirmishing order to be tried, so that we may be spared in future having to drill our men upon false principles, and to inculcate erroneous ideas as to what actual fighting is like, and how it is best to be carried out.

The other arms of the service may be as fine as possible, and the *physique* of our men may leave us nothing to desire; but as it is infantry alone who can win battles, it is dreadful to think that if dragged into war to-morrow, our national honour—ay, even our fate as a nation—would have to depend upon an infantry instructed in the art of fighting as practised in an age that is no more,—upon an infantry whose proficiency in unpliable and ponderous movements would only enable it to die in a disciplined manner. Individuals learnt a great deal by the manœuvres of 1871, and the

rigidity and slowness of our movements was then fully appreciated by most men. Notwithstanding, however, we have again this year seen brigades deployed for attack into stiff lines, where each man felt the trouser-seams of his comrade to his right and his left. If the object was to give us a fair idea of what war was when both sides were armed with smooth-bores, the battles on the Wily were good; but if the British tax-payer imagines that they afforded the army any instruction in the art of fighting nowadays, he is very much mistaken. The soldier-angels must have wept with grief as they looked down and saw our magnificent Guardsmen slowly advancing up bare hills to attack lines dressed with a regularity that would have gladdened the heart of Frederick the Great's most zealous sergeant-major. Had the game been in earnest, we know that our Guards would never have surrendered, but they would most certainly have died *en masse*.

"The general idea," or outline for the operations on the plains of Salisbury, has recently been published in one of the newspapers. It had previously been made known only to the two opposing leaders. What the reason was for keeping it secret we know not; for in order that a proper interest should be taken in the operations by all engaged, it is very essential that even the rank and file should be told as much as possible regarding the object aimed at, and the movements intended to accomplish it.

The Northern Commander assumed throughout the campaign a strict, passively-defensive rôle, scattering his troops over an extent of country that could not have been defended by an army six times his strength. He was consequently weak everywhere, affording his opponent daily opportunities for that brilliant offensive which he adopted from the

first, and which, if the opinion formed of him at the Cape be true, is so much in consonance with his active, fiery disposition.

The general idea was a very good one, and was calculated to afford instructive lessons to all thinking officers in its execution. Why the programme laid down for the third day's fighting was altered has never been satisfactorily explained: the thread of the operations was broken by introducing into them a badly-designed Wimbledon field-day. Camp rumour assigned the well-known good-nature of the Duke as a reason, it being said that he was anxious if possible to force the Northern side into a victory by ordering it to assume the offensive. Some said it was to be accounted for by the irrepressible love on the part of the public for sham fights executed on restricted spaces. Every one can certainly see well upon such occasions, but no one learns anything. The result of the third day's fighting was as unfortunate to the Northern side as that of the two preceding engagements, and its commander proved himself to be as unhappy in this, his only attempt at an offensive operation, as he was throughout in his defensive combinations.

For Control purposes, it is, we are told, absolutely necessary that the officers of that department should know beforehand where the troops are to encamp each evening. In order to secure their being at the places decided upon, it is necessary to have upon the theatre of war in the rear or on the flanks of the opposing armies, imaginary forces that can be brought up at any phase of an action, for the purpose of counteracting any great success won by either side in advance of the position previously selected for Control purposes as its camp for the night. It is only by means of such imaginary forces that the require-

ments of the Control Department can be satisfied without in any way fettering the freedom of commanders, and arranging beforehand which side is to be successful in each action. The first day's fighting on the river Wily is a good example. Both generals had the most unlimited freedom of action. Sir R. Walpole took up a defensive position behind the river, with a view to preventing the invaders from crossing it. He failed signally, as all generals have done in real war who have attempted a similar feat by remaining strictly on the defensive. Sir John Michel carried half of his force across at an unguarded point, with which he pounced down upon the flank of the enemy at Codford, whilst the other half assailed him in front. There being only a small part of the Northern army at that point, and as the remaining brigades were too distant to render timely assistance, the result of the day's fighting was pronounced to be a Southern victory. But the Control, or rather the contractors who sail under the Control colours, had provided for feeding the invading army some miles south of the river from Codford. Sir John Michel ought to have been beaten, as he would have been had his opponent been a real general; but he had won, and to prevent the arrangements of the firm of Control, Contractors, & Co. from collapsing, it was essential that the invaders should retire from the position they had won. What was to be done? Unexpected as the result was, it had been provided for beforehand, by having an imaginary force marching from the west through Warminster to the defenders' assistance. It was at once announced that these reinforcements were advancing upon Sir John Michel's flank; so he had nothing for it but to fall back behind the river, giving up the advantage he had gained.

By this plan two opposing forces

can be really moved about a country by a skilful player as pieces are on a chess-board, without in any way whatever restricting the commander's liberty of action as regards the combinations of any one day's operations.

Much has recently been written in the daily press condemnatory of these "paper armies;" but if the reporters who deprecated their use so strongly had to arrange for the operations of two hostile armies on a restricted area, so as to secure that they shall come into collision at least four times without interfering with the contractor's arrangements for feeding them, "our specials" would find it impossible, without the assistance of imaginary forces, to give to the operations the cohesive resemblance of a real campaign.

It is to be regretted beyond measure that the result of each day's operations was not published every evening, comments being made at the same time by the Commander-in-Chief upon the mistakes committed, and upon all movements or combinations that seemed to be worthy of favourable notice. It is difficult to do this when the troops march every day; but if they only did so every alternate day, it might be easily effected. It is believed that if this was done, the manœuvres might be made most interesting to even the rank and file engaged: the soldier would understand the game he was helping to play, and would take a pleasure in it. No nation is so fond of outdoor amusements, and of everything approaching to sport, as we are; and all who watched our men when the opposing sides had now and then approached one another too closely, must have remarked how strongly the schoolboy instincts came out in the man; indeed, upon these occasions it was only by the efforts of the officers on both sides that the tussles of a football-match were prevented.

Explain every day to all ranks exactly what has been done, and what the position of the game is, and what are to be the conditions for the next fight, and we feel sure that our men will become as interested in it as in their cricket—in fact, that the game of war, as practised during the manœuvres, would soon be reckoned amongst their athletic sports.

It is also thought that by halting a day between each fight the opposing sides would have admirable opportunities for practising outpost duty in presence of one another. As the manœuvres have been carried on hitherto, our soldiers have not had sufficient opportunities for practising the operations of what is known as "little war." Our commanders and their staff learn a great deal in the larger combinations, but regimental officers can only be taught the functions of war belonging to their grades by our working the outposts of one army against those of the other. It is not necessary to keep the men out at night; but certain hours being fixed, say from 6 A.M. until 6 or 7 P.M., each army should during that time be covered with outposts, to be conducted in every respect as if on active service, reconnaissances on a small scale being made at will by both sides. A large extent of country should be covered as if each force to be protected was an army of, say 50,000 men. The ordinary plan hitherto followed for affording instruction in these most important duties has been by sending out a brigade or division to take up a line of outposts in a certain named direction, having only an imaginary enemy in front. But little is learnt thus, as it is necessary to have an enemy in the flesh, to let all see what they could and could not do under similar circumstances in real war.

The number of umpires employed was not sufficient: to each brigade

one should be attached daily, to remain throughout the day's operations at the brigadier's side. During both autumnal manœuvres an umpire, like the typical policeman, was never to be found when wanted. The duties of an umpire are very difficult; and upon the manner in which they are performed everything depends when one force is to operate against another. Artillery-fire is the greatest element of difficulty in their work, as with guns firing at long ranges it is impossible to discern from a distance what they are directed upon. To estimate their imaginary effect upon troops is never an easy matter; but when they are themselves being hammered by hostile batteries the calculation becomes still more perplexing. The tendency throughout has been to over-estimate their effect. The effect of a well-directed artillery-fire upon dense masses of troops at 2500 yards, or upon lines and battalion columns at 1500 yards, is most serious; but upon skirmishers, upon small company columns on the move, or upon cavalry at the trot over undulating ground, it is very slight indeed.

All who studied the positions taken up, and the manner in which they were attacked, must have remarked that open ground destitute of cover was avoided by the assailants. We have all learnt from our fights near the Wily that the parts of a position in front of which no cover exists, and which can be swept by both infantry and artillery fire, are with our present arms impregnable. Formerly, the strongest portions of a position were those where the country being close, the hedges, ditches, trees, &c., provided cover, enabling you to dispute the ground inch by inch: such ground will still enable you to make an assailant pay dearly for the possession of every field. It has not lost its actual, but its relative strength—it is as formidable as ever;

but from the fact of an assailant being unable to move over the open parts of a position, he is forced to attack now where formerly the existence of those natural parapets and obstacles would have deterred him from attempting. Formerly, this strong ground was only weakly occupied, whilst the bulk of the defender's force was massed to await the enemy's attack over the open country, where all arms could manœuvre freely. Positions will henceforth be occupied in just the opposite way. The open ground will be held by a small force, whilst the serious work will be expected in those places where undulations of the ground, woods, &c. &c., would enable the assailants to approach the position without being too seriously exposed to fire.

The county militia from each of the three kingdoms showed to advantage this year, being in every respect vastly superior to the metropolitan battalions employed last autumn. The weak point with all our reserve forces is their officers. Few of them possess that faculty for command which the bulk of our officers in the army acquire after a few years' service almost without knowing it. It is difficult to describe it, and it is impossible to acquire it from the study of books, although to some it comes by intuition. Apart from this most important qualification, the militia and volunteer officer possesses none of that special and scientific knowledge of his profession to which so much importance is now so justly attached in armies. As long as these sham reserves are maintained, it is difficult to see how this their fundamental weakness can be obviated. Non-military men were surprised to see such a long line of stragglers behind each militia regiment, not being aware that marching, equipped as a soldier, is an art that practice only can impart. The country

labourer who spends his days on his legs in the fields, and who walks daily some distance to and from his work, marches at first very little better than the city recruit. During the manœuvres, the marching of the best county militia corps was far below that of the worst regiment in the army that had been recruited chiefly in a manufacturing district. Of the Irish militia, the stories that floated about camp of amusing incidents occurring in the ranks of a certain battalion made one think of Charles O'Malley, and regret that we had now no Lever to make us laugh at the droll wit of his Irish soldiers. The following anecdote might have emanated from Mr Mickey Free. During a change of front in one of the day's operations, a staff officer, seeing a company of their regiment straying from the right direction, galloped up, calling out, "Go fours right, sir!" Seeing that no notice was taken of his order, he said to a sergeant who happened to be beside his horse, "Why doesn't your captain give the word, 'fours right'?" The instant reply was, "Plaze sur, he isn't on spaking terms with his men."

There is a feature peculiar to manœuvres that must ever distinguish them from real war—it is the rapidity with which ground is got over in action. There is no death staring the eager soldier in the face to cool his impetuosity: the silencing effects of appalling horror that has struck the bravest heart as comrades to the right and left fall beside you groaning masses of mutilated humanity, horrible even to remember in after-years, has no existence in a sham fight. The assailants of the strongest positions push on regardless of the imaginary hail of bullets around them. This will always give the attacking side the advantage in mimic war, and the only way in which it can be coun-

teracted is by the umpires halting the assailants constantly, so as to delay them in advancing about as long as they consider the strength of the defence would have done if the rifles carried bullets. If this were intelligently done, the defensive side would, as in actual war, be able to bring up reinforcements to the point attacked. This disregard of fire was displayed throughout all the recent fights, but most glaringly so during the last day's operations, when one of Sir R. Walpole's divisions hurried on, regardless of a cross-fire upon it, to attack the brigade covering the passage of the Avon by the Southern force in its advance towards London.

The manner in which our cavalry was handled this year, and the superior knowledge of their work evinced by all ranks in it, proves that last year's manœuvres were not in vain. The lessons then learnt have borne fruit; and when brigades under Colonels Marshall or Baker shook themselves free from the thralldom entailed upon them by their cautious commanders of the barrack-yard school, no cavalry in the world could have shown to greater advantage. There can be little doubt that Sir John Michel owed much to his cavalry for the manner in which he was kept constantly informed of his opponent's movements and whereabouts, and for the way in which his own doings were screened from hostile observation. One cavalry regiment went through the campaign without horse-blankets, and none turned out stronger at the march past or with horses in better condition. As far as instruction is concerned, our cavalry has only to go on in its present course of teaching the officers and non-commissioned officers the multitudinous duties that would fall to their lot in war, to make it *all that can be desired*; but it is *necessary that* our best cavalry men

should now turn their attention to their equipment. The weight carried by the horse is excessive; every dragoon carries a portmanteau of clothes behind him, and his saddle, bridle, and accoutrements are cumbrous and heavy. Listen to the noise of a hussar as he trots along a road, and one would think that he had a lot of chains and tin kettles dragging to his horse's tail.

Artillery learn less than the other arms by these manœuvres: its power being in its fire alone, it is unable to estimate its effects when blank ammunition only is used. As already remarked, owing to the long ranges at which guns now open, it is difficult to impress upon the distant troops that they are the targets aimed at. The only arm of the service that can never get "out of hand" in an action now is the artillery. It was essential that its movements should be no longer tied to those of the infantry; but there is a good deal of nonsense talked about the necessity for giving it "greater independence and freedom of action." As guns will now be moved very little after they have once opened fire, and as their position must henceforth be to the rear of the infantry, they will be more than ever, and more than the other arms, under the immediate orders and at the disposition of the general commanding throughout an action. Our artillery is as perfect as it can be; but maintaining during peace the large number of horses per battery that we do, is a reckless waste of money, that might be employed in keeping up more gunners. Fifty horses per battery would be ample for all purposes during peace.

It is not easy to find work for any large number of engineers at these manœuvres, for we cannot loophole walls, make abatis of woods, or improve the picturesque appearance of country houses and villages by placing them in a state of defence. The destruction and repair of bridges

can only be imaginary ; and in England it is difficult to include unfordable rivers in the theatre of operations, so as to afford practice in pontooning, and in the construction of trestle or improvised bridges. During the last two days' fighting on the lower Wily and on the Avon, pontoon-bridges were thrown over those rivers most admirably and very quickly. The new pontoon equipment fulfilled the purposes for which it is required to the satisfaction of all ; and it may, we think, be said with truth, that we are certainly ahead of all other armies in the pontoons now used in our service. Last year a defensive position was strengthened by field-works at Chobham that gave the engineers plenty to do : this year, the plan of campaign adopted did not admit of repeating this practice ; and besides, the ground was badly suited for hastily-constructed field-works, the soil being generally little more than six inches in depth, below it lying the hard chalk.

The tools allotted to each battalion for intrenching purposes were distributed throughout the baggage-waggons this year, in order to economise transport ; the construction of rifle-pits or shelter-trenches was therefore, as a rule, out of the question. Last year these tools were carried in a cart allowed to each regiment for the purpose, and, following immediately in its rear, were always available for use.

The engineers of old who laid out Yarnbury Castle and Old Sarum, must have had a thorough knowledge of their profession. If they were as skilful in attack as in their defensive works, the engineer's science must have been well taught in those ages long past. As these and others of their fortifications in the neighbourhood were the admiration of all, so they were also a puzzle to the ablest, as to where they got

water for the large numbers that must have been required to defend works of such magnitude. The water-supply for all our camps was admirably arranged by our engineers ; in one instance, the water was forced up a considerable height over half a mile's distance by means of a little traction-engine, that has now been regularly introduced into our service for field use. It can draw great loads up steep hills, is not too heavy to go over bridges constructed of our pontoons, and can be used as a stationary engine to pump water, cut timber, &c. &c.

The use of the field-telegraph was still further developed this year than last autumn. The equipment for it is all that can be desired, and the manner in which it was worked throughout was most creditable to all concerned.

When anything peculiar or out of the ordinary routine has to be done, the first idea occurring to every one is, "send for the engineers:" no matter what it may be that is required, no difficulty is ever made by them—the work is done, and done well. When at Chatham or any other station, the repair of all material is done by the Control Department ; or rather, if it is a telegraphic implement, it is sent to a London instrument-maker—if a waggon, it is sent to the carriage department at Woolwich. The controllers pay the bills for the work done ; but as regards all scientific or warlike stores, they cannot be expected to know whether it is well or badly done. Having within the corps no establishments prepared to meet such wants, their only resource is the Arsenal at Woolwich, and failing that a London firm. This expensive routine is clung to most tenaciously by Control officers at stations, but in the field the practice is abandoned ; and dur-

ing the recent manœuvres not only did the engineers look after their own equipment, but at the request of the controllers they actually repaired the Control waggons as they broke down from time to time, thus giving one more proof of how unsuited the Control system and Department is for the rough work of actual service.

Space prevents us from enlarging further upon combatant subjects. Let us briefly sum up, therefore, the advantages afforded to the fighting troops by these manœuvres :—

1st, We have had the soldier-like qualities and ability of a few proved as clearly as the incapacity of the majority of the generals employed has been made patent to all.

2d, We have been able to corroborate in our sham fights the views proclaimed by the ablest soldiers after the war experience of 1866 and 1870—viz., that to fight in the tactical formations of the last generation, as laid down in our drill-books, is to insure destruction in the day of battle.

3d, Our staff officers have had admirable practice in moving troops, and in the numerous duties devolving upon the staff in war, upon the able performance of which success must ever depend.

4th, All officers who were anxious to learn the practical work of their profession have done so, the amount being, it is believed, in all instances proportional with their desire for knowledge.

5th, About 30,000 men, shaking themselves clear of barrack life, became a mobilised little army, complete in its regimental transport, and, after the first few days' experience, fit to have taken the field as far as its capacity to move together as an armed force was concerned. Every one employed acquired practice in the duties involved in the by no means easy work of collecting together individual battalions, regi-

ments, and batteries from their stations scattered over Great Britain and Ireland, and organising them into brigades and divisions. In Prussia, where everything is local—where the same regiments always form the same brigade, the same brigades always the same division, and so on—the operation is simple enough : every one knows his own place, and knows the men who have to fill the various positions as commanders, as staff officers, and as administrative functionaries. With us it is the reverse ; we are and always must be scratch packs swept together from all directions, with huntsmen knowing nothing of their horses, their hounds, or their whips. This is the work that would fall upon us in case of war, and it is most desirable that our officers should have practice at it. That practice is beneficial is evidenced by the improved manner in which this duty has been performed recently over our first attempt last autumn.

In fine, it is impossible to estimate in money, or even to describe fully in words, the advantages accruing to the combatants of our army from these manœuvres.

The non-combatants in our army are the chaplains, the doctors, the veterinary surgeons, and the officers of the Control Department. The last named is the only one of these departments regarding which it is now intended to say a little. In doing so, we feel how impossible it is to avoid wounding the susceptibilities of men who are the most susceptible of any attached to our army. As our sole object is to let John Bull know what he gets for his money, we must only ask their pardon and proceed to our task.

It is with the system, not with the officers who carry it out, that we find fault. In the Department there are many able men, and all employed during these manœuvres

worked zealously and with the best intentions.

It may be assumed that few of our readers have waded through the very able but voluminous report of Lord Strathnairn's committee, the result of which was the present Control Department. Although it may officially claim such a parentage, there can be no doubt that as an infant it was changed at nurse, and bears no resemblance whatever to the reputed authority for its existence. The summing up of the committee may be described in a few words to be a recommendation to concentrate all the transport of the army under one department, and to divide the charge of stores into two departments—one to have the custody of the warlike, the other of what is generally known as provision for both man and beast. To prove how widely these recommendations have been departed from, it is enough to say that the transport of all regimental stores—such as baggage, tents, cooking utensils, intrenching tools, and the 1st reserve of small-arm ammunition—was carried out regimentally during the recent manœuvres, whilst the staff baggage and reserves were carried by the Control; and that all stores, the *munitions de bouche* and the *munitions de guerre*, were united under the custody of one department—viz., the Control. In fact, not only have the committee's recommendations been departed from, but they have been reversed, and the very opposite course has been pursued.

Stories without end, that would be amusing if they were not told of public duties badly performed, might be repeated of commissaries who had been all their lives issuing pork and biscuit being suddenly called upon to take charge of, and to issue, as requested, such complicated material as percussion fuses, galvanic batteries, electrical apparatus, &c.; or of men who, having been educated

as purveyors to the care of hospital stores and utensils, finding themselves responsible for the purchase of hay and oats for the cavalry. These facts might be related *ad nauseam*; but as our business is more with the system than with the manner in which it is worked, we shall pass on to consider the fundamental imperfections in the Control—imperfections so great that it would be impossible for an army to make war successfully whilst it had to depend for food, clothes, and stores of all sorts, upon it.

The Control system is based upon the dogma that all officers belonging to the Department are men of vast knowledge and information ranging over all subjects, so that the officer who is to-day in charge of the slaughter-yard, with his attendant train of butchers, may to-morrow be in charge of intricately-constructed warlike stores—that every man is equally well fitted for all commissariat and store duties. According to the Control regulations, if a corps receives bad bread or beef, it is obliged to complain to the man who issued it, who generally pooh-poohs the complaint; or, if he does send it on to higher authority, sends it forward with his own version of the story, so that by the time it reaches the general, it has received such a Control gloss, that it is frequently dismissed as frivolous. Now it is essential to protect the soldier from his butchers and his bakers, as he has no voice in selecting them. Armies have more than once been ruined by its commissaries; and there have been many instances in war where, whilst the soldier was nigh starving upon bad and insufficient rations, the commissary grew rich: the country paid largely all this time for this disastrous condition of affairs. It is all very well to say that the Control officers are under the general, but the general cannot be everywhere; nor is it possible

the most highly gifted of soldiers to command an army or even a division in the field with success if his mind is to be upon all sorts of occasions distracted by inquiring into complaints as to the mustiness of oats or the quality of salt pork. He can only exercise a control over details by means of a body of efficient staff officers, who, having no status apart from him, and being as it were a portion of himself, supplementing his powers of eyesight and of hearing, and developing the inspirations of his brain, putting them into shape by painting in backgrounds and details to the outlines he sketches for them, are enabled to represent him in all disputes between departments, and in all complaints made by the soldiers of those employed to purvey to their wants. These staff officers have the welfare of no special department at heart; they are soldiers themselves, and know a soldier's wants, understand his prejudices, and are thoroughly acquainted with what is and what is not necessary for his comfort and wellbeing. On the other hand, those who have to provide and issue the food and stores required by troops during war, whether you call them commissaries, controllers, purveyors, or by any other name yet to be invented in the shady side of Pall Mall, belong to a department in which they hope to rise; and that is to them what the regiment is to the combatant soldier: its welfare and its reputation occupies the first place in their thoughts, and its interests are considered first. Fault is not found with them on this account—it is but human nature that they should do so; but fault is found with those who have, by framing the existing Control regulations, deprived our soldiers of the protection formerly secured to them by the supervision over the administrative departments formerly exer-

cised by the staff of the army. We know positively that during the recent manœuvres there were irregularities in the hours of issue, and in the quality of the articles issued, that were never reported to the generals. The Control Department is fast getting beyond all control; it has thrown aside the check that was formerly exercised over commissariat expenditure by the Treasury, as it now audits its own accounts, and, in breaking free from all staff supervision, its officers can do as they please. They acknowledge a nominal allegiance to the general commanding, but their real chief sits in the War Office, to whom all their reports are addressed, from whom alone they expect promotion and reward, and to whom they write privately upon all subjects. The general, who is responsible for the successful working of the whole machine committed to his care, may write whatever he desires to the Commander-in-Chief; but if he wants to communicate with the War Department, he has to do it through his controller, who may, in forwarding it, give any opinion he wishes, officially pooh-poohing, if he likes, the views expressed by the general commanding on the spot. The Control officials at the War Office, to whom this correspondence is addressed, belonging to the interested Department, imbued with its ideas and instincts, having the desire for its reputation and interests uppermost in their thoughts, naturally take the views of their own officer in preference to those of the general. This is the most complete example of an *imperium in imperio* that it is possible to exhibit. General officers are forced to submit to this during peace, or resign their employment; but surely even the controller most ignorant of war cannot believe it possible that any commander of reputation in the field would submit to such a system during actual warfare.

That the duties of supply may be effectively carried out on service, it is essential for the proper efficiency of the soldiers to be fed that those duties should be performed by an administration closely watched over and supervised by the general through his staff officers. Supply duties are of a purely executive nature; the supply officers buy, store, and issue food, &c. Staff officers, on the other hand, have no executive functions to perform; they are the eyes, ears, and mouth-pieces of the general they represent; without him they have no position or authority. They can give no orders of themselves; they are bits of the general spread out at different points through the force he commands, multiplying his powers of vision and voice. They supervise the work performed by subordinate generals to see that the commander's orders as to discipline and combatant duties are duly and properly executed; and it is as essential for the wellbeing and success of an army that they should also supervise the civil departments, enabling the general-in-chief to check their irregularities, and to keep their officers up to the proper mark, so that he may be certain that his men are well fed and their wants well supplied. These supervising duties can never be performed effectively, or to the satisfaction of the army, by officers of the Department, or by any officers springing from the civil departments concerned. All who have had experience in the ways of soldiers—who, from having shared the same bivouac fire with them on service, know their views and mode of reasoning—know well how essential it is that they should be satisfied, and that they should feel that their complaints are attended to, and that they should trust those who have to watch over the supply of their wants. A soldier is always suspicious about

what he terms "his rights," and the great bond that exists between the British private and his officer is based upon the implicit trust that the former has in the latter's honour. The tradition of the army has taught him from the first day he donned her Majesty's uniform, that his officer was a man belonging socially to a class above all petty temptations, and every day's subsequent experience taught him to look upon him as his protector from the frauds of all classes or departments intrusted with supplying his wants. There is not the remotest intention here of bringing any charge against any civil branch belonging to the army; but no matter how unjust the accusation is, it is well known to all combatant officers in the army, and even amongst them the feeling is shared by many, that what is known to them as "War Office authorities," including all the civil departments belonging to it, are ever on the lookout to defraud the soldier of what is his due. Where is the soldier in the army, be he general or private, who does not believe most sincerely that he has been cheated over and over again upon the score of barrack damages? The Control Department contains officers of as high a moral standard as can be found elsewhere, and far be it from us to cast any slur upon their honour; but traditions of frauds committed in olden times by commissaries still hang round all supply departments, and it is difficult to disabuse the military mind of belief in such stories; they have given rise to a rooted suspicion that is still felt by the soldier in all his dealings with those who furnish him with food. As long as he had the power of complaining to his officers, who could complain direct by the nearest general or staff officer, he knew that as they had no possible interest in either giving him short weight or inferior rations, they would see that

he got "his rights;" but now that he knows his complaints go to officers of the department by which the rations are issued, he believes that he can be injured with no chance of redress. Some may perhaps think that the British soldier is such a dull fellow that he does not understand this peculiarity in the working of the new system. This is a great mistake; for whatever is known and much commented upon by the officers, is soon universally known to the men; and the grievance as expressed in modified terms by the officer, does not lose in magnitude when translated into the private's language. That the Control Department is distrusted by the army is a fact to be ascertained by questioning the first officer you meet. This mistrust has given rise to such dislike, that, in one of the oldest and largest military clubs this year, when, at a general meeting, some hundreds of members being present, it was proposed to substitute the words "Control officers" for "Commissariat officers" in the enumeration of those who were eligible to become members, there was only one member besides the proposer—a Control officer—and the seconder who voted for it; the proposition was, in fact, received by groans of disapproval from all sides. This most unprecedented expression of feeling on the part of the officers of the army is a fair indication of what they think of this new department that has come of late so mysteriously into existence. Intended for the use of the army, it has been created in opposition and in wanton disregard to the wishes of all ranks, and in violation of its most cherished traditions.

We have recently heard a great deal of the privileges of the Household troops; and the levellers, in sweeping away some abuses, have insisted upon pulling down also the honorary peculiarities that are the

distinctive marks of the sovereign's body-guard in all countries.

One of those distinctions was, that orders could only be given to our Guards by their own officers. We have, however, only taken this distinction from these time-honoured troops to confer it upon the Control. A staff officer can convey his general's orders either verbally or in writing to any one under that general's command, no matter what may be his position in the combatant hierarchy; but he cannot do so to the controller, who will receive orders only from his general, and from him even only in writing. This is a system that it may be just possible to carry on peace manœuvres under, but not even a Napoleon could make war under it, even should it be possible to find any able general who would attempt to do so. To arrange the details connected with moving troops, and to issue instructions so as to carry out the views of the general commanding, is one of the most important duties devolving upon a staff officer. He has to secure that at all times during the operation the several columns are in a position to fight; the least hitch may cause confusion, ending in disaster. In making these arrangements, administrative considerations crop up everywhere, so that it is ridiculous to hope that they can be well and efficiently made, unless the officer intrusted with this most responsible duty can convey orders to the Control Department in the same manner as he can to the medical department, and to all generals commanding corps or divisions.

To have with an army in the field a department that wishes to control everything, to interfere with military movements, assuming to itself military functions that can only be properly and effectively performed by combatant officers, whilst at the same time it rebels against any

military control being exercised over its officers, or the manner in which they perform their duties, is to court disaster. The department is a monstrosity, a fungus that must be cleared off before the stem can be brought to a healthy condition.

There were a few who fondly hoped that the establishment of this Department would be an economical measure. Their hopes have been sadly disappointed. Its numbers are increasing steadily. This year the number of Control officers employed for the manœuvres was, we believe, above 120—that is, in round numbers, 8 Control officers for every 2000 men employed. Last year the number was far less, although the baggage of regiments was then carried by that Department; whereas this year it was, as already stated, carried by the regiments themselves, who found the drivers and the officers to look after it. Those who have campaigned in India, where we are told that columns consisting of several thousands take the field with only one commissariat officer to perform for them all the duties now devolving upon the Control Department—the custody and issue of all military stores excepted—will be astonished when they learn, that to administer to the wants of less than 30,000 men, divided into two forces, it was found necessary to have over 120 Control officers. If it was necessary to have 8 Control officers to every 2000 men in the richest of countries, intersected in every direction by roads and railways, and in railway and telegraphic communication with the metropolis and all the great markets in the kingdom, and when the troops were supplied with rations by contract made before the manœuvres began, we are curious to know how many would be necessary in an enemy's country, where contracts would be impossible, and where, perhaps, there would be few

roads and no railways? A pæan of praise has been sung over the Control exploits at these manœuvres, as if the supply of our small force, circumstanced as already described, was a matter of any great difficulty. It was not as if the movements were unfettered by supply considerations, and as if the Control had to feed the divisions wherever the generals chose to encamp, or as if the Control arrangements depended upon the military situation of the moment; but it must be remembered that the generals had to make their operations accord with and fit into the arrangements made before the operations began by the Control with contractors for feeding the men each day at certain indicated spots. It was not as if these 120 Control officers had to scour the country to purchase supplies according as the troops moved. With the exception of a couple of days or so of bread baked in commissariat ovens, when the troops were close to Amesbury and Wily, the whole affair of supplying them with food was one of contract.

This being the case, and as we may presume it is to be the established system for our manœuvres in future, it would be a great economy if the affair was put into the hands of men like Messrs Spiers and Pond, who, without any Control officers to look on, would, we feel sure, carry out the supply arrangements with just as much satisfaction to the men to be fed, and would give them fresh meat and bread every day, instead of the salt pork and biscuit issued so many days whilst they were marching.

If it was desired that the department that is responsible for feeding the army, whether it be called Control or Commissariat, should obtain some real practice in the duties that would devolve upon it, a very different system should be pursued; its officers should be practised in making local purchases and contract

and in drawing the supplies required as much as possible from the districts operated in. This might be a little more expensive; and as it would entail labour and great trouble upon the department concerned, it is to be feared that its officers would not advocate its being tried.

As the troops are now fed during the manœuvres, the Control officers learn less of the work that would devolve upon them in war than any others—doctors, of course, excepted. The country is therefore put to a very needless expense in having so many of them employed. They are highly paid, and have to be supplied with Government horses.

We maintain that the Control Department has been put to no sufficient test during these manœuvres: the duties that have devolved upon its officers have been of the lightest possible kind. We have not been able to prove whether its officers really could or could not feed an army in war; but the majority of officers outside the Department, and some good ones in it, who have given administrative subjects much attention, have been able to arrive at a conclusion as to the Control system, and few will deny the statement that, as organised at present under its published regulations, it cannot be employed for the supply of an army in the field, if war is to be carried on successfully. This is a most serious matter for the country, and it is to be hoped that the

system may soon be made the subject of inquiry by a Royal Commission, so that opinions may be obtained from practical officers who have no departmental interests to serve, and no ends but the welfare of the army to aim at.

In answer to the questions with which we began this article, after duly considering the events of the past manœuvres, we believe them to have been successful; and that as an army, and consequently as a nation, we have had over and over again our money's worth in the amount of practical instruction acquired by the combatants. Every one that was desirous of learning has learnt much—far more even than he is aware of. The dullest, and even those who did not wish to learn, have learnt despite themselves, and without knowing they have done so. We trust, therefore, that Parliament may annually provide the money required for such a useful object. If, in addition to the instruction afforded, our manœuvres of this year lead to a reform being effected in the Control Department, and to the institution of a system of tactics suited for war as now carried on, the expenditure of the £99,000 voted for them will have been the means, whenever our next war may be thrust upon us, of saving millions of money, and of saving what we can spare far less, the lives of thousands, and perhaps the honour of our arms.

THE
DEVELOPMENT OF ARTILLERY TACTICS
IN COMBINATION WITH THE OTHER ARMS.

A Lecture delivered at the Prince Consort's Library, Aldershot, on the 27th March, 1872,

BY

CAPTAIN FOX STRANGWAYS, R.H.A.

IN now submitting this paper to a larger number of my brother officers, I have thought it better to leave out certain portions of merely local application. There may still be some illustrations which are hardly intelligible without plans to those unacquainted with the ground, but to have altogether omitted them would have left the paper very bare of illustration, and have considerably altered its bearing and scope.

I propose in discussing the subject I have chosen, to dwell mainly on the tactics of field artillery, as they have been and must be further modified by recent changes in arms, to consider the probable direction of changes in tactics in the immediate future, to ascertain how far our own practice is based on true principles, and where there may seem to be errors, how they may best be corrected.

I shall illustrate what I have to say from the action of artillery in recent campaigns, but chiefly from the manœuvres of last autumn, and the ground round the camp. There are various reasons for this. In the first place, it is very difficult to get minute reliable details of the employment of artillery in the field. Contemporary writers treat the subject either from the picturesque or from the strategic point of view. The wars of 1866 and 1870 have given us a rich harvest of newspaper correspondence admirable for its particular purpose, and inestimable as material for the future historian, whilst there have been also works of all sizes and pretensions throwing a flood of light upon the general operations of the campaigns, and even the larger tactics; but the actual disposition and handling of the troops in combat, so far as I can ascertain, has been lightly touched by these numerous writers. Of all arms the artillery has been the worst used in this respect, and thus it comes to pass

that although certain broad principles of tactics seem to come out, very little detailed illustration can be given from the last campaigns.

The tactics of field artillery are governed chiefly by three considerations :—

Mobility.

Efficacy of fire.

Shelter from the enemy's fire.

Before attempting to estimate the position in which we now stand, and to deduce the principles on which the employment of the arm should now be founded, it will be convenient to take a very cursory view of the progress of artillery, or rather to notice certain landmarks in its history which have for a longer or shorter time influenced its application in the field.

Until quite the end of the sixteenth century, the heavy and rude construction of the carriages, the length of the guns required to develop the power of the ill-made powder, the long trains of wagons with ammunition, rendered artillery of little use in the field. Tactics were then of the most simple nature. If the guns could be dragged into a position in the line of battle by the hired or pressed transport of the country—the only means of locomotion available—and a few rounds fired from them, it was all that could be expected. A second movement was rarely practicable, and in the event of retreat the guns were generally captured, and I dare say the generals were not sorry to see the last of them.

The first attempt at a really movable artillery was made by Gustavus Adolphus, early in the seventeenth century. He introduced light iron guns drawn by two horses, and first made cartridges, by which means he obtained a much greater rapidity of fire—guns having been previously loaded with loose powder, by means of a ladle. This was a distinct advance in artillery, and led to some development in tactics. Guns were now divided, and placed in the centre and on the flanks of the line.

It was not, however, till the latter part of this century (the 17th) that a special corps was raised in any country. Until this time the gunners had been cosmopolitan. Their art was considered a purely mechanical one, they were apprenticed to it in limited numbers, and their services were at the disposal of any prince who needed them. This evidently tended in large measure to the ill repute of the arm.

Louis XIV. first raised a regiment for artillery service, and from this time in all the countries of Europe artillery *matériel* progressed until the time was ripe for the next great step which influenced tactics. This was the introduction of horse artillery on the detachment system by Frederick the Great, in 1759. The idea, however, was slow in taking root, and it was only after the French revolution that the use of horse artillery became general. Through this, and the improvements in *matériel*, mainly due to Gribeauval, in France, artillery was ready for the system of handling brought to the greatest perfection by Napoleon, and continued with little modification to our own times, of which the main characteristic was the rapid assembly of large masses of artillery for a decisive effort, the bringing an overwhelming fire to bear on the vital point.

The immense development of mechanical science in the latter half of this century, and the invention of rifled guns, have now brought us to another landmark, probably more important than any that has preceded it. How

far this will influence the accepted tactics, either in principle or detail, and what are the points to which we Englishmen ought especially to direct our attention, are the subjects to which I shall now address myself.

In discussing the question of mobility, I shall consider only horse artillery and the ordinary field batteries, armed as they are, or will be in the immediate future—the horse artillery with 9-prs., the field batteries with 16-prs. There may be of course in particular countries, and with reference to particular operations, both lighter and heavier guns brought into the field, but the principles which govern their disposition and movement will be the same, however the details may vary.

It may be said broadly that mobility, in the sense of actual quickness of moving, has not been increased by our recent changes. What we have gained by the progress of science has been given to increased power in the gun, and the actual weight behind the horses has not been lightened—in fact, in some measure it has been increased. It is, however, evident that a very real mobility has been gained, for a machine of vastly increased power can now be moved at the same, or nearly the same, speed as the inferior guns of a former time, and the effect produced in a much shorter time, over a larger space, and with an exactness hitherto unknown. The conflicting elements of weight and power are of course important, and within certain limits will always be subjects of controversy. Some are of opinion that we have rather overstepped the limit of weight. However this may be, whether our guns might be a little lighter or not, there can be no doubt that their mobility, in the true sense, is greater than anything we have had before.

There it a true and a false mobility; I am afraid our whole system and training has led us to attach importance to a kind of mobility which, although brilliant and effective at field days, cannot stand the test of service. It is not the power of galloping a few hundred yards into a position, blazing off a few rounds, and dashing off again, *ventre à terre*, to another position, differing from the first only in being a little worse; nor, again, is it the power of rapid movement on the part of guns only, which constitutes true mobility. True mobility must comprehend the movement of every part of the machine—guns, gunners, and ammunition—and must take account of the necessity of keeping up the movement over long distances, in all kinds of ground, in spite of obstacles, and with all the disadvantages of casualties and loss of condition in horses.

The most movable artillery is that which can get soonest and safest to the point from which it can deliver an effective fire.

There is no use in getting three or four miles to a flank, and then finding half a mile of deep ground up hill before you, and your horses dead beat. It is little comfort to say you did not know it was so far. Something should always be kept in hand to meet miscalculations and difficulties. Nothing is gained, even in short distances, by hurry in taking up a position. The general result of galloping into it is that the guns are not placed to the best advantage, and are unnecessarily brought under fire. It is rarely of consequence that a position should be occupied a few minutes sooner or later. At field days there is often an impatience to see troops moving, but almost the only occasion on which hurry can be necessary, or even desirable, is when a movement in the nature of a surprise has been undertaken. When artillery has been detached to occupy a position on the flank of the enemy, and its ap

proach is discovered, moments are important to establish a fire before he can alter his dispositions to meet it. I do not in the least overlook the importance of securing the initiative of fire on every occasion, but I maintain that it is more possible to secure it by secrecy than by dash. In the case of a direct attack, it is only possible by secrecy. The enemy knows the range of all the positions that can be taken up by artillery, he is on the look out for every indication of their being occupied, and as soon as artillery is seen coming wildly over the crest, he pours in a storm of shell which probably puts several guns *hors de combat* before they even unlimber.

This importance of the initiative of fire was well understood by Napoleon, and was one of the causes of his great success with artillery. I think it was at Austerlitz that the French artillery under Senarmont, although inferior in number of guns, prevented the Austrians, who came up by degrees, from ever getting their guns into action. So, in a pamphlet by Captain Laymann, of the Prussian infantry, there is evidence to show that the initiative of fire established by the Austrian artillery was one of the main causes of the comparative failure of the Prussian artillery in the campaign of 1866.

It is sometimes possible, however, to take up a position so quietly, by running the guns up by hand (where the ground is not very steep)—at all events by exposing the smallest possible number of horses, that the guns may be able to open fire before they are discovered.

From what I have said of the true mobility of artillery, the proper place and use of horse and field artillery follows. As at present organised, our field batteries are not capable of moving out of a walk with any degree of efficiency, except for very short distances. The gunners must be left to toil behind, as but three, or at the most four, men can be taken with the gun. Witness the well-known case of Turner's two guns at the Alma, which arrived in position on the flank of the Russians without gunners, and were served by a brilliant staff of artillery officers who were on the spot, and fortunately had nothing else to do. By the introduction of axle-tree seats, we are on the eve of increasing the mobility of the field batteries, which may possibly be still further increased by mounting men on the off horses of the gun teams.

I hope to see the mobility of field batteries increased to the utmost extent possible. I believe it to be the direction in which the greatest practical reform is now to be made, and it will double the power of the artillery that first takes it in hand. Some people have supposed that upon this level might be created a field artillery in substitution of both our present horse artillery and field batteries. This by no means follows. A very slight consideration of the respective uses of horse artillery and field batteries, will show that they stand upon different ground, and that the necessity for both is unassailable. Horse artillery is required to act with cavalry, supported by and supporting it; to accompany it in long and rapid reconnaissances, to execute long flanking movements extending over many miles of ground, and generally to act with freedom and rapidity on the wings, and in pursuit, and in retreat. Field batteries are, or should be, equally mobile on a confined area, and mounted detachments would be superfluous, and even mischievous, for all the ordinary purposes of the line of battle, and *working* generally with infantry. Fewer horses are exposed to fire, and the cost of raising and maintaining, and difficulty of foraging is greatly diminished. For these reasons the bulk of the artillery must always be field bat-

teries; but those who advocate the abolition of horse artillery on the detachment system have to meet this difficulty: whatever system of carrying the gunners is adopted—limbers, axle-tree seats, trail, off horses—the weight of the gunners must be added, *i.e.* 7 or 8 cwt. Can it be maintained that this is a trifle? We know and see every day the difference that 5 cwt. makes to the horse artillery with the present gun. Whatever mobility may be attained without the mounted detachments, the detachments have always got the 7 or 8 cwt. in hand, and it can be put on a more powerful gun, and an increased number of rounds in the limber. The extra weight, in fact, gives a margin within which the machine may be perfected, irrespective of any question of sufficient rapidity of movement; and although horse artillery on the detachment system is unnecessary and too costly for universal use, it cannot be dispensed with for certain most important purposes of war.

The more the power of artillery is increased, the more it becomes necessary to give the arm a wider development on the field of battle. The particular gun which combines best the somewhat conflicting requisites of power, accurate shooting, capacity of shell, number of rounds carried, and lightness, must always be a difficult question, but whatever gun is selected, mounted detachments separate from the gun must always give a power of moving further and faster.

I contend for the greatest freedom of movement, and the utmost rapidity possible over long distances; but the actual moving under fire, and into position, should be done with deliberation, in order that there should be the least possible exposure of men and horses. Every fold and dip of the ground must be taken advantage of—not of course pedantically, and to the sacrifice of valuable time, but with an eye to the easiest and most sheltered line of advance. Positions should be well reconnoitred beforehand, and the very best spot for each gun carefully chosen, that there may be no further movement afterwards. A few minutes given to the choice of a position may save a battery from annihilation.

What are the best positions for guns, and how is the greatest effect of fire to be obtained? It is a popular notion that guns should always be on the tops of hills, and never far removed from the other arms. Thus we see, over and over again, at field days, guns placed on steep contracted knolls, with no single advantage, six guns placed where there is properly not room for two, limbers and horses jammed up together, so that a single shell would create a panic. We see also unseemly contests for room between artillery and infantry. A little consideration will show that rifled guns have given artillery a new zone, so to speak, behind and on the flanks of the other arms, in which it is entirely unhampered and free to select any ground. Assuming infantry fire to be effective at 900 yds., artillery has a zone nearly a mile wide, in which it has nothing to interfere with it, and it must not be forgotten that, even when exposed to attack, it may be defended by the flanking fire of other guns and of infantry at considerable ranges, and may be as safely placed as in actual contact with the infantry. To illustrate what I mean, I will cite a recent field day:—A supposed enemy, coming from the north, had driven the division from Miles Hill, and the south bank of the canal. A new position was taken up, and a brigade of infantry and several batteries occupied Long Hill. Surely the slopes immediately below Caesar Camp would have afforded an admirable and safe position for some gun

They could not have been attacked across the front of the infantry, and could only have been dislodged by an attack upon their flank in turn, which would require time and fresh dispositions. The guns and the infantry support each other, though separated by 800 or 900 yds.

The requisites of a good position for artillery are simple enough. It should have a moderate command over the point at which the fire is to be directed, should be easy of access from the point of approach, afford direct cover for the limbers and horses, as well as protection from being easily taken in flank or in reverse by the enemy's artillery. The ground in front should be unfavourable for the action of the enemy's projectiles; for instance, with a steep bank or declivity to the front (which would catch many shells falling short), broken ground, or marshy ground. The capture of Balaclava affords an instance of the slight effect of shells in marshy ground. A battery of horse artillery came into action at the head of the harbour against the fort, in which the Russians had some little coehorn mortars. They of course knew the range accurately, and threw 20 or 30 shells amongst the guns. These all burst very well, but did nothing more than throw a little mud about. Absolute hollows should be avoided for the limbers, as they may prove shell traps. The need of moving the battery to the front without making a long detour must be remembered.

Few positions, of course, are good in all respects. The choice requires a good tactical eye, which is able to strike the balance quickly, and decide on the points which ought to have most weight. For instance, when near the enemy, and apprehensive of attack by infantry, broken ground in front would afford cover to the attack, and would cease to be an element of good in the position. The most perfect shelter of guns and gunners, and easy ground of retreat, become then predominant considerations. In such a position, an easy slope to the rear, allowing the guns to be run back and limbered up without bringing the horses under fire of infantry, is valuable. On an exposed flank, the immediate neighbourhood of a wood is dangerous.

So far I have treated of considerations which, although they should be understood by all officers—for without knowledge of them there cannot be intelligent co-operation—yet are mainly the business of artillery officers themselves. I now come to the larger and more generally important question of the general handling of artillery in the field. It will be convenient to treat this from the separate points of view of the attack and defence. In the reconnaissance of a position preparatory to attack, it will probably be necessary to use artillery to force the enemy to display his position. If anything is really to be gained by this, he must be pushed with some force. We generally see horse artillery used in our manœuvres for this service. As the whole object is to draw fire on the guns, and force the enemy to shew his hand, it must be a mistake to use horse artillery, and run the risk of crippling it before its hour arrives.

When the point of attack is decided, the artillery must prepare the attack, concentrating its fire on it, and maintaining it with vigour to the latest moment, directing it when the attack is fully engaged on the enemy's reserves. The accuracy of rifled guns enables the fire to be kept up over the heads of the assaulting troops almost to the moment of contact.

To concentrate a fire means now, more than ever, to disperse batteries. By *dispersing* the guns over the artillery zone that I have spoken of, you obtain

largely increased power over the ground occupied by the enemy. From a position directly in face, you often see but the muzzles of the guns of a battery: by going 300 or 400 yds. to the right and left you open the limbers of the flank guns. By posting the guns on different points of the semicircle over which you range, you open up numberless hollows and folds of the ground in which troops are placed, creating a general fidgettiness and sense of insecurity, and exerting a moral effect by the number of points from which the fire proceeds, which is wholly wanting when the guns are massed in large batteries. In many accounts of the battles of the late war, stress is laid on the way in which the French were disturbed by the unexpected places from which the Prussian artillery opened fire. At the same time, the fire is fully concentrated on the desired point, and the guns themselves are far more secure because not crowded in a place unfit for them, but placed at wide intervals. On this point I will notice a prevalent idea which I think an error. It is said that one gun should never be placed alone, under any circumstances. This is founded on the notion of maintaining a constant fire, to prevent an enemy rushing upon a gun when unloaded—true, to a certain extent, with smooth-bores at close quarters, though exaggerated then, but absurd with the longer ranges of rifled guns, and especially so in the case I am now considering, of a distant fire preparatory to attack. Suppose the crest of a hill affording good positions for four guns, at intervals of 20 or 25 yds., but no other place except spots for one gun each, 80 or 100 yds. on either flank. It would be ridiculous not to place the guns there; they are parts of a huge battery of perhaps 100 guns, extending over miles of ground, and the thing wanted is to place each gun best, whether alone or not. Two guns well placed, carefully served, with every round telling, are worth six exposed to fire and hurriedly served. Nothing is a greater mistake than to cram more guns into a position than it will bear. I believe that one of the things most borne in upon Prussian artillerymen in the late war, was the necessity of taking very large intervals between their guns and limbers.

I want to make myself understood upon this point. Excessive dispersion of guns without a definite and important object entails many evils. The battery is the tactical unit, and as a general rule it will be most convenient to keep it together; but just as there are occasions when large masses of guns may be concentrated, so there are other occasions when the guns of a battery may be more widely separated than usual. To make a fixed rule that one gun is never to be alone, and to carry that out, in a narrow sense, is to create mischief and confusion.

There may be occasions when guns will be massed together in considerable numbers, but the introduction of rifled guns must tend to make them very rare. Fire can now be concentrated from points in such a large arc, and with so much more effect than by the direct concentration of the guns themselves, that the disadvantages of massing guns appear more prominently. These are, that they interfere with the action of the other arms, and are vulnerable to the attack of skirmishers in an especial degree. Further, if the country is not very open, the mass of carriages in advance or retreat has to pass by one or two roads, bridges, or defiles, thus causing delay and difficulty.

The Prussians discovered the power and freedom given by rifled guns working on the flanks. At Sadowa they stuck to their old principles, and tried to get to the front in the centre of the battle. They could not fi

room, and did nothing. In the French war, the guns were much more on the flanks; notably at Sedan, where the batteries on the flank and rear of the French above Floing were a marked feature of the battle.

Guns may often be pushed forward on the flanks so as to overlap the enemy on both flanks, and squeeze him out of a position. If there is any ground for artillery on the flanks within range—that is to say, a mile, or a mile and a half on either flank—this is perfectly safe. If the guns can find a position to annoy the enemy seriously, he must either penetrate between them and the main body to cut them off, make a direct attack on them, or again outflank them. He cannot attempt to cut them off without getting squeezed between them and the guns with the main body. If he makes a direct attack, or flank attack on the outer flank, his whole position of defence is shaken, to say nothing of the loss of time in making his dispositions for attack.

The position at Frensham, between the Great and Little Ponds, facing east, is an example of what I mean. An attacking force at Kettlebury Hill could outflank it, both right and left, concentrating an artillery fire on the rear of the position from Lock's Hill and the ground above on one flank, and the hillocks beyond the Devil's Jumps and towards Greysheet Down on the other. All the forces support each other with artillery fire. The Frensham force cannot move across the common without the risk of being crushed between all three, or attack either flank without in turn exposing itself. The radical fault of the position is, that whether occupied compactly or with some extension, its flanks and rear are insecure against an active artillery, without an immense extension, whilst the openness of Frensham Common in its front, which is an obstacle to direct attack, is also an obstacle to counter attack.

The full development of the power of rifled artillery will, I believe, only be attained by still bolder movements on the flank and rear of an enemy, sending guns with strong escorts to make long detours to seize positions from which the whole position of the enemy may be shaken. There is always such ground to be found by a tactical genius, and even where the real effect of the fire may be comparatively trifling, the moral effect created by the sudden and unexpected appearance of a force of doubtful strength in a dangerous neighbourhood will go far to loosen the hold of the enemy on his main position. These extended flank attacks of artillery will of course be combined with the determined attack of the main position. They are no doubt to some extent dangerous—the force may be thrown upon an eccentric line of retreat, cut off from the main body, sometimes sacrificed altogether; but the possible results are so brilliant that a general who thoroughly understands the power of rifled guns will not hesitate to develop his tactics in this direction. Horse artillery find one of their main uses in these extended movements, but to gain the full advantage of the freedom of artillery, we must, I think, alter our system of escorts. The escort of a battery now is ludicrously insufficient. A troop—at the most a squadron—is sent with a battery of horse artillery. What use is it? Any attack made on the battery by cavalry would be made most certainly in superior force, and against a few infantry skirmishers the battery is powerless. The escorts of detached batteries should always, when possible, be composed of both infantry and cavalry, and should be of sufficient strength to hold the front and flanks of the battery against sudden attack. The escort is the eye of the battery, and should, by its skirmishers, search and overlook all *the ground* on the front and towards the flanks, particularly the most exposed

one, so that the commanding officer of the battery will be relieved of all fear of sudden and unperceived attack, and free to devote himself entirely to the effect of his own fire. It is impossible to lay down absolute rules for the strength of escorts; they must depend on the service for which the artillery is required, and the degree to which it is separated from the main body. Probably, when separated at all, the escort ought seldom to be less than half a battalion of infantry and two squadrons of cavalry. What can be more absurd than when a battery has got into a good place, and established a fire on the flank of the enemy, to see it obliged to retire before the fire of a dozen skirmishers?

I know that the subject of escorts is rather an unpopular one. Commanding officers and brigadiers dislike their regiments and brigades being weakened; the officers who command the escort consider it a disagreeable and inglorious duty. Opinions differ as to the formation of the escort. The author of the "Tactical Retrospect" is strongly in favour of a special and permanent escort, but a recent pamphlet which many in this room may have read, by the Prince of Hohenlohe-Ingelfingen, the Commandant of the Brigade of Artillery of the Prussian Guard, is as strongly against it. I believe that although there are many advantages in accustoming the same bodies of troops to work together, the practical difficulties in the way of a permanent escort would be very great, and that it would be better to form it on the spot for the particular service required. I have spoken of the force as an escort, and this, perhaps, rather conveys the idea of a small force, entirely subordinate to the battery; but it is obvious that it might often be of very considerable strength, and that the officer commanding might or might not be the artillery commanding officer. The reason I speak of it as an escort is that I suppose the artillery attack to be the main object, the other troops being only for the protection of the artillery, though of course the dispositions for defence would rest with the senior officer. I feel sure as the subject is considered and discussed, whatever there may now be of prejudice will give way, and it will be seen that the whole benefit of the invention of rifled guns depends on their latitude of movement, that there cannot be this without security from attack and capture, within reasonable limits, and that the part of both guns and escort in the critical flank movements of which I have been speaking is of the highest importance, and one that offers the highest opportunities of distinction to both. It is of course impossible that in very rapid and extended operations an infantry escort can accompany horse artillery. I only say whenever it is possible the three arms should be together, and infantry should always follow if there is a hope of their being able to get up.

The advance of the artillery on a position after it has been stormed, is rendered more difficult by the increased range of guns. When guns used to fire at 700 or 800 yds., it was easy to see when to limber-up and advance. Now that the guns are probably firing at two or three times that range, they may, after supporting the attack from their first position, either not see the right moment to advance, or be delayed by the length and difficulty of the ground they have to traverse, so that the infantry, after their first success, may find themselves again in face of the enemy, exposed at perhaps short range to artillery fire, without the support of their own artillery. Here is one of the most difficult problems for the commander of the artillery—to provide for the effective cannonade of the first position, to cover a check or repulse, &c.

at the same time to be forward for the second attack. Some batteries of the reserve may be pushed forward as much as possible with the infantry, taking all the advantage possible of cover, or if the greater part of the artillery has been engaged, those batteries which soonest cease to be useful must be sent forward. In any case, the operation is a difficult one. Probably mitrailleuses would be useful here. They have a terrific effect at short ranges, are light, and easily moved, and expose few horses to fire. A few mitrailleuses, crammed up with the infantry, might be at hand at once, and exercise a powerful effect in supporting their lodgment, and in preventing the retiring enemy from re-forming.

In the defence of a position, the part of the artillery must always be most important. The position of the guns must be carefully chosen, so that every inch of the ground over which the enemy can advance should be seen, and particularly that a strong fire should be concentrated on the roads and the ground on which it is probable the mass of the force will advance, whilst at the same time the guns must be protected, if possible, by the natural formation of the ground, but where this is not practicable, by vigorous use of the spade—the “demoralising spade” as it has been called, but here at least there can be no ill effects from its use. Whilst occupying all the points from which direct fire can be obtained, it is equally, or even more, necessary to take advantage of the flank fire that can be obtained. A position is like a fortress, and can only be effectively defended by seeing the whole ground in front. To follow the analogy, it is essential that positions in front of the main line in the nature of outworks should be strongly occupied, and held with firmness, to make the enemy develop his attack, and prevent anything in the nature of a surprise. Last autumn, if some points had been held in front of Fox Hills, if even the knoll behind which the Household Cavalry and the 42nd were to be seen had been occupied, would it have been possible for General Lyson’s Brigade to break in upon the position with such disastrous effect? A strong position in itself may often be very weak, if held only in one main line. If forced at one point, which may well happen by the good tactics of the opposing general, all may be lost.

No defence can be thoroughly efficient without taking advantage of opportunities of counter attack. For this purpose it will be convenient to have the horse artillery on the flanks, to manœuvre on the flanks of the advancing enemy. Occasion may offer of firing on him when massing for attack behind ground which secures him from direct fire. If the horse artillery, and indeed all artillery not required in the main front, is disposed on the flank in echelon, it is not only powerful for counter attack, but ready also to meet and counteract the flank attacks of the enemy, to which it is almost certain he will resort.

I have laid great stress on these artillery attacks and counter attacks, because, in my humble judgment, it is the direction in which the full advantage of modern artillery is to be sought.

I know that high authorities advocate the employment of artillery in masses—amongst others the author I have already mentioned, the Prince of Hohenlohe-Ingelfingen, who himself (at the attack of St. Privat, I believe), massed 84 guns with distinguished success; and I will add that, from all I have heard, the tendency amongst the higher Prussian artillery officers during the late war was to mass their batteries. It would be most unbecoming in me to announce any *ex cathedra* opinion; but having been led to hold different views, let me simply give my reasons, and you can judge what they are worth.

First, although the Prussian artillery showed marked improvement since 1866, and although a general impression exists that it was very perfect, I think most Prussian officers would say that there was still plenty of room for improvement in its tactical performances. Witness the able pamphlet "Die Schäden der Organisation der Preussischen Artillerie."

Next, something must be allowed for the natural tendency of artillery commanding officers to wish to keep large masses under their own hands. The mere fact of having brought a large number of guns into action has something sensational about it; it strikes the imagination, and is sure to be remembered. The recorded facts of artillery in the wars of Napoleon are chiefly concentrations of large numbers of guns, and it is even yet hard to pass from the letter of his tactics.

I am far from saying that artillery should never be massed now, only that the occasions are much more rare, since guns can now work effectively over a far larger arc.

The evils of concentration are these:—The guns obtain only a direct fire on their object. They hamper the other arms, are less protected by them, and cannot support their attack so long, as a general rule, as when dispersed. Unless the country is very open, and practicable for all arms, the guns must either arrive unsupported, or be late in coming up. Prince Hohenlohe advocates the reserve artillery of a *corps d'armée* marching at the head of the main body of infantry, on the special ground that a mass of artillery can be utilised in action before the infantry comes up, for half an hour or more; and Captain Laymann takes much the same view. What if an attack upon this mass of guns should be pushed home by swarms of skirmishers? I believe the very case might have occurred to the artillery of the Crown Prince's army at Sedan. It was pushed forward early in the morning across the Meuse, towards Floing, and was long unsupported. Blumenthal was very uneasy about it, and perhaps if Ducrot had remained in command of the French, and carried out the retreat he wished, the blot might have been hit.

Lastly, masses of artillery, like cavalry, may be kept in hand for grand opportunities that never come.

What, then, are the modifications in artillery tactics to be looked for in the immediate future?

Extension of front and depth, both in attack and defence.

Dispersion of batteries, both for security, and more effective concentration of fire.

Employment of horse artillery on the greater radius, field batteries on the less.

Bolder action of guns on the flanks and rear in detached positions.

Large escorts with detached batteries handled as a separate tactical force.

Care to take advantage of shelter in moving.

Large intervals between guns when moving, and between limbers also in action.

The sacrifice of guns, if necessary, to secure the success of the main operation.

These are some of the principles by which we must guide ourselves in the future application of artillery. In what I have already said, I have tried to bring them into relief. It remains for me now to touch upon the more prominent faults which we see committed in the handling of the arm, to consider

how they can be avoided, and, finally, how the systematic tactical training can best be given, which is, I believe, the greatest want of our army at the present moment, not only in the handling of each arm to the best advantage, but in the higher and only real sense of tactics, the handling of the arms in combination.

And here I wish to say that any criticisms I offer are made in no dogmatical spirit. They will count only for what they are worth, you can judge them without the bias of any personal weight, and can readily form your own conclusions. The one thing I earnestly wish, is to excite interest and discussion on the subject. There can be no progress without discussion, but out of full and free discussion truth will finally prevail. I need hardly add that as I claim no personal authority, neither do I wish to claim any monopoly of tactical knowledge for artillery officers. To fail in technical artillery knowledge would indeed be disgraceful to us, but in the school of tactics we are all learners together; we are fully sensible that the faults committed in the field are often our own, we wish to study together how to avoid these faults, and, hand in hand, to advance the knowledge and power of the noble service to which we all belong.

Horse artillery is too much used with disregard of its special advantages. It is commonly sent a few hundred yards to the front to open fire at the commencement of an action. Thus it may be crippled early in the day for no corresponding advantage. A few moments are of no importance, and in every point of view field batteries are more effective in direct fire. It may, of course, be necessary to push horse artillery with cavalry some distance to the front, beyond the effective range of the guns with the main body. I only contend that horse artillery ought not to be used for direct fire when field batteries are available before the crisis of the action, nor ought it to be placed in position in the main line of defence without very cogent reason.

A French troop of horse artillery was *sacrificed* in this way in the Crimean war at the Tchernaya. It defended the Traktir Bridge at short range, and in a position where a field battery might have found better cover and fought with better effect.

In spite of the recent order of H.R.H. the Commander-in-Chief, artillery clings desperately to the other arms. The guns move more independently, but at the hottest time guns and infantry are pretty sure to be jammed up together. The field day I have already quoted is an instance—a brigade of infantry and several batteries jostling each other upon Long Hill. Surely the mass of artillery should have been upon the range behind, over the steeple-chase course, with some batteries of horse artillery on the slopes under Cæsar's Camp.

Again, in an attack on Cæsar's Camp and Beacon Hill from the north, little can be done by artillery in the plain in support of the direct attack of infantry, but is there not some field on either flank for detaching artillery, or rather a strong mixed force? The position is a very strong one against direct attack, but on the flanks and rear it is assailable, and is moreover an awkward one to retire from.

Again, in the attack on Fox Hills by General Carey, was there not scope for a free use of artillery considerably on the right of General Lysons' brigade, so as to gain the height and sweep the position in flank as soon as the mask should be thrown off? And for the cavalry and horse artillery of the

defence, or at all events part of it, was it not an error to retire before the brigade directly across the narrow plateau, and towards the remainder of the force? I believe an eccentric retreat towards the left, the guns remaining on General Lysons' right, would have done much more to check his advance, and have given more time to Sir C. Staveley to take up a second position. There would have been no more risk in this, I think, but in any case safety was not the first consideration. The whole brunt of the defence was thrown upon the troops at that point, and they were bound to sacrifice themselves to gain time.

Guns are generally too crowded, and positions taken up in a hurry. This, no doubt, arises from the anxiety to be doing something, and from the small space over which the guns are manœuvred. It would soon be corrected if the batteries were accustomed to a freer handling.

Guns should never be in the same line with infantry; mitrailleuses may probably find a place with them in the close attack of positions, but guns are hard to place effectively under infantry fire, and their fire is less effective at rifle ranges. Infantry would occupy the ground better.

This ought to be well understood, for nothing is a more common error in our manœuvres than the way in which skirmishers retiring retire at once to guns in action, instead of holding their ground in advance of the flanks. At the very moment guns are most useful in checking the enemy's advance, they are forced to retire because pressed by his skirmishers. And so it goes on; the guns retire, immediately the skirmishers retire again to them, and so on.

The artillery is, I think, hampered by an honourable tradition which attaches disgrace to the loss of a gun. This has been carried much too far. There would be indeed disgrace in the loss of guns through carelessness, or want of proper precaution, but none in the sacrifice of guns for a worthy object. Daring in attack, and persistency in defence will seldom be carried to the full extent to which they are capable whilst this opinion holds its ground to the extent it does.

Still more is this the case in manœuvres. Everything tends to make an officer inactive. Without excitement and hope of distinction to spur him on, he will be little inclined to lay himself open to blame for losing his guns, or to take it out of his horses by hard work. He sticks to old fashioned ways—to what is safe and sure. Rashness should be encouraged at field days, that we may learn what really may be safely undertaken and accomplished.

The real safety of our guns should be confided to the other arms. Artillery is powerful only for offence, and the cavalry and infantry should feel that it is their part to defend the guns with which they have a brotherhood in arms, as it is the part of the guns to support them to the uttermost. The shame in the loss of guns should be to the brigades and regiments with which they are placed, the shame to the gunners in allowing the other troops to be overwhelmed.

One fault that much prevents the success of our field days, is the little idea of the operations given to the officers holding subordinate commands. For instance, the officers commanding batteries are seldom told more than to take up a position on a certain hill, or to support a particular attack. They generally only know vaguely that the enemy is somewhere in their front. If he is imaginary, they seldom know what strength he is supposed to be, where he comes from, and on which point his retreat is likely to be, how far his position extends, on what point of the position the fire is to be directed, where

the attack is to be made, or on what position or by what road to retire, if retreat is ordered. If there is a real enemy, although some of these points may be plainer, others remain just as obscure, and in addition it is generally an open question whether the position of a battery is to be held obstinately, or yielded to comparatively slight prussure—whether, in fact, the position is of sufficient importance to incur serious loss for.

To go fully into this point would be to open a question with a most important bearing on tactics—the field organisation of artillery. This is evidently coming to the front. Our German friends are full of it, and *we* shall hear enough of it by and by. I only wish here to note that I have not forgotten it, but it is too weighty a subject to attempt to treat in the time at my disposal.

If, then, there are mistakes in the handling of troops committed in our manœuvres, how can they be remedied, and how can the necessary tactical instruction be best given at our camps and large centres? I believe that the greatest want of all, the missing link which is altogether dropped out of our system, is the handling of the three arms in small bodies, the careful training of men and officers in the minor operations of war, the march of small columns, advance and rear guards, the attack and defence of bridges, defiles, villages, detached farms, parts of a position. We devote the greatest attention to appearance and to drill, we polish and re-polish the unit until it is the marvel and admiration of beholders, and when we have got every part of the machine to a state of perfection, we seem to think that it will come by nature to put it together. Our autumn manœuvres, and indeed our large field days, are like trying to run before we can walk. They are on too large a scale for effective criticism, except as regards the strategical plan, or at all events the large tactical execution of it. The superior officers are too much occupied with the large features, and have no time to superintend details. Hence the same mistakes are made over and over again. Nothing is or can be criticised in detail. And so it must be until officers are taught to handle small bodies of troops as they are taught drill, and junior officers are accustomed to handle them against each other. When we take up this missing link, and only then, shall we be able to derive full profit from large manœuvres.

The combination of the arms is at present only possible at our camps, and a few of our large stations. Does it not seem that more might be done to train subordinate officers for command, and to implant in the minds of all ranks the definite principles on which they must act before the enemy? Amongst them must be found the future leaders of our troops; how are they to succeed in war unless they are trained in tactics as they are trained in drill and interior economy?

It is not thus that the Prussians have attained their marvellous success. They have not neglected the beginning; they have indeed built upon a thorough and minute knowledge of details, but they have known how to keep these details in their proper place and due proportion, and how to subordinate them all to the main end of progress and practice in the whole art of war. Yet they are not blinded by success. Even now, on the morrow of it, their most earnest writers are freely criticising. Everywhere the cry is "*Excelsior!*" Everywhere their success is looked upon as the point of a new departure. Why should not we borrow something of this spirit; not follow the lead of the Prussians because they have achieved the latest success, but work out the problems of the future for ourselves?

I am afraid we have sometimes rested content with the first stage, with the perfection of drill and equipment, in which we stand pre-eminent, and have thought that straight going and hard fighting will do the rest, or that, at all events, we shall pick up what we want after a licking or two. Well, is there time? Recent wars hardly encourage the idea; there is no royal road to success in war more than in anything else. I do not want anything we have yet reached to be relaxed. Let our drill and turn out be as carefully maintained as ever, but I plead for more opportunities of training in the field, beginning with training in small bodies that can be carefully supervised.

I believe that if instead of our somewhat desultory and uncertain method of drill, we carried out more strictly and thoroughly the annual system which exists theoretically, but is often disregarded in practice; if we thought more of the proper sequence of instruction, and gave each part of it entirely into the hands of the individual responsible for it; there would be a marked improvement in the tactical performances of the arms. Men learn more in a dozen consecutive drills, than in three times the number interspersed with other exercises. I think time is often lost now by a habit of looking at the year as a collection of weeks, instead of as a whole.

The preliminary drills, all that go to make up the efficiency of a regiment or battery in detail, should be steadily pursued, each one its allotted time, from October to the middle of March; then would follow the drill of the battery or regiment, including not only drill proper, but the handling of the unit under the conditions of service; then the brigade drills; after this the troops would be ready to be put together for minor manœuvres, and finally for grand manœuvres. The time within which each branch of instruction would have to be given, would of course depend on the station, and whether the combined manœuvres could be practised at all.

I hope that it will soon be found possible in every military district to bring together small bodies of all arms, for a short time in each summer, irrespective of the larger manœuvres. But whether this can be done or not, all I am now anxious to note is that the principle of consecutive instruction should be rigidly maintained as an economy of time, which is more and more important as short service becomes the rule.

Finally, there is one very real hindrance to the development of tactics; and that is the jealousy, or rather, perhaps, want of interest in each other, between the different arms, and not only between those with which I have now been immediately concerned, but amongst all branches of the service. Our admirable regimental system, amongst its many and undeniable merits, has one defect. It has fostered a selfish and narrow spirit, which can see no good thing outside its own circle. This is the old spirit of the guild, and there can be no progress till it is utterly thrown away. The true *esprit de corps*, whilst neglecting nothing that tends to the perfection of its own corps, and guarding its honour and reputation with the utmost jealousy, will not remain content in selfish isolation, but will reach on to the wider brotherhood in arms, which indeed springs into life in the stern atmosphere of war, but is too little sought in the piping times of peace.

One word in conclusion. I know there is an impression abroad that only those who are masters in the lecture room should appear here. It appears to me that this is entirely to misapprehend the use and object of these lectures. Speaking for myself alone, I have no pretension to teach such an audience as

this, and nothing was further from my thoughts when I first consented to come here. It was, I believe, to create and foster an interest in professional subjects amongst a larger number of officers, to stimulate discussion which might bear fruit in practical improvement, that these meetings were first started. It is, then, only right and proper that those serving in the command should come forward to do what they can, and it would be out of place for able and well known men to come from outside to lecture on abstract subjects. The lecture room here should be in close connection with the practice ground.

I wish that these meetings were sometimes followed by discussion; but, at all events, if they ever strike a note in the mind of any present, they do not entirely fail of their object.

The negative criticism which condemns them for not being better, and equally condemns the training in the field, which it will not take the trouble to try to improve, is an enemy to knowledge and to progress. But the immensely increased interest shown on all sides in professional subjects, shows that there is power working that must bear fruit in the future. Everywhere new ideas are taking root, everywhere we are recognising that knowledge is power, and we must not forget, what we are somewhat slow to grasp firmly, that union is strength.

ALDERSHOT,

March 27, 1872.

